

# NOTICE OF AN APPLICATION FOR AN AMENDMENT TO A PLANNING PERMIT

THE LAND AFFECTED BY THE APPLICATION IS LOCATED AT:	11-33 Narelle Drive, Aspendale Gardens (Lot S2 and Common Property)
THE APPLICATION IS TO AMEND PERMIT NUMBER:	KP-519/2012/A by Amend Planning Permit No. KP519/12 to allow for the development of 85 dwellings (23 currently approved) within a four storey building with a reduction of the car parking requirements
THE APPLICANT FOR THE AMENDMENT TO THE PERMIT IS:	Nepean Planning Consultants
THE APPLICATION REFERENCE NUMBER IS:	KP-519/2012/A
<p>YOU MAY LOOK AT THE APPLICATION AND ANY DOCUMENTS THAT SUPPORT THE APPLICATION AT THE OFFICE OF THE RESPONSIBLE AUTHORITY:</p> <p>This can be done during office hours and is free of charge</p>	<p>City of Kingston Municipal Offices Cheltenham Office: Level 1, 1230 Nepean Highway, Cheltenham 3192 During office hours 8.30am - 5.30pm</p> <p>OR on-line:</p> <p><a href="http://www.kingston.vic.gov.au/link/planning">www.kingston.vic.gov.au/link/planning</a></p>

Any person who may be affected by the proposed amendment to the permit may object or make other submissions to the responsible authority.

**An objection must :**

- be made to the Responsible Authority in writing,
- include the reasons for the objection, and
- state how the objector would be affected.

The responsible authority must make a copy of every objection available at its office for any person to inspect during office hours free of charge until the end of the period during which an application may be made for review of a decision on the application.

THE RESPONSIBLE AUTHORITY WILL NOT DECIDE ON THE APPLICATION BEFORE:	29 April 2016
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**If you object, the Responsible Authority will tell you of its decision.**

Privacy Notification: The personal information provided in a submission/objection is collected for planning purposes in accordance with the Planning & Environment Act 1987 (the Act). The public may view an objection or submission in accordance with Section 57 of the Act whilst the planning application is current. In accordance with the "Improving Access to Planning Documents" Practice Note dated December, 1999, a copy of your submission will be made available on request. If you fail to provide contact details your objection may not be considered. For information regarding access to Planning documents please contact Council's Planning Department on 1300 653 356.

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11-13 Narelle Drive, Aspendale Gardens - STAGE 2  
SEPP N-1 Assessment of Noise to the Proposed Development  
and Recommendations for Noise Control

Report Number 640.10687-R3

21 December 2015

BC39 Pty Ltd

Version: Revision 0

# 11-13 Narelle Drive, Aspendale Gardens - STAGE 2

## SEPP N-1 Assessment of Noise to the Proposed Development and Recommendations for Noise Control

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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 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 BC39 Pty Ltd.  
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	Status	Date	Prepared	Checked	Authorised
640.10687-R3	Revision 0	21 December 2015	Dianne Williams	Jim Antonopoulos	Dianne Williams

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## 1 INTRODUCTION

SLR Consulting Australia Pty Ltd (SLR) were retained to prepare an acoustic report for Stage 2 of the proposed residential development above the shopping centre at 11-13 Narelle Drive, Aspendale Gardens.

A permit to build Stage 1 was granted in 2013. Stage 1 comprised 22 dwellings above the shopping centre. Stage 2 is proposed to comprise a further 43 dwellings.

A number of the Stage 2 dwellings will be exposed to noise from the existing ground level supermarket loading bay and truck access route and to noise from mechanical plant on the roof of the supermarket. This report addresses these noise impacts.

The proposed Stage 2 dwellings will displace many items of mechanical plant that currently serve the smaller tenancies at the shopping centre. This report does not address noise from any plant that will be relocated as details of the plant and relocation options are not currently available.

SLR conducted an acoustic assessment of noise from the supermarket to the Stage 1 dwellings in 2013. Information obtained during that assessment has been used to assess impacts to Stage 2.

### 1.1 References

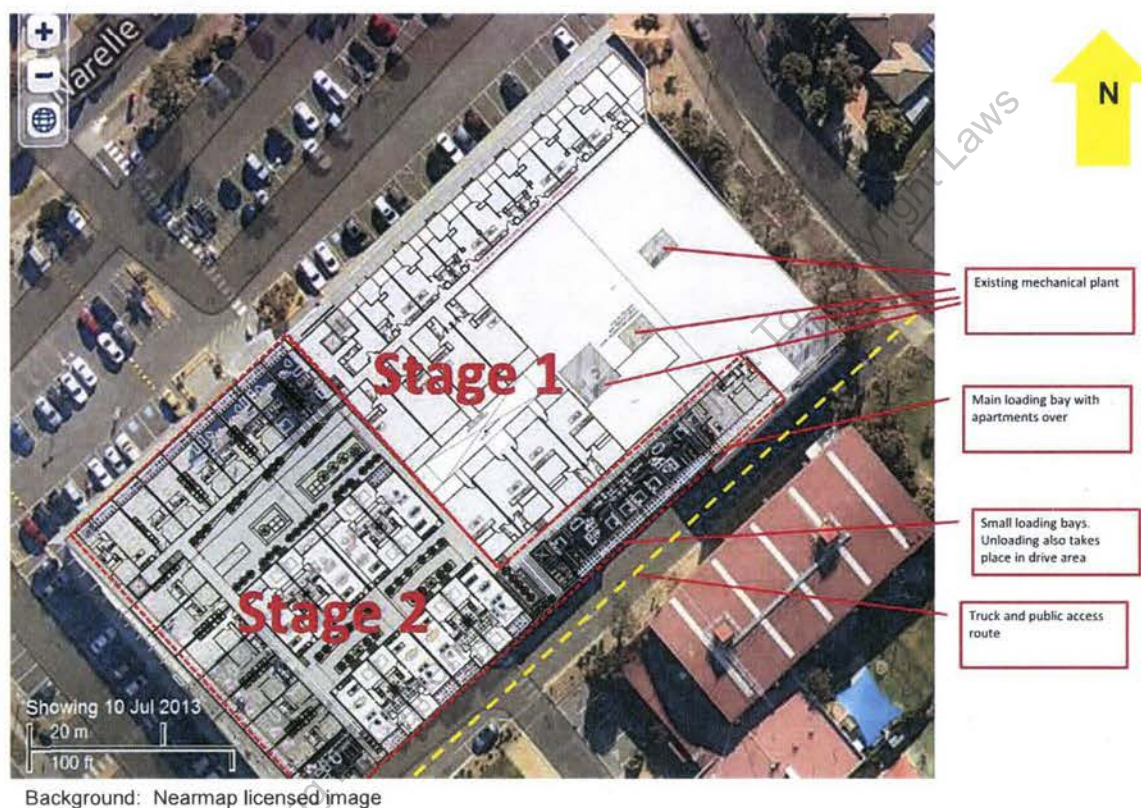
The following documents and other materials have been referred to in this report:

- Architectural plans prepared by Finnis Architects Pty Ltd, provided to SLR in August 2015.
- City of Kingston letter dated 10 July 2015.
- State Environment Protection Policy (Control of noise from commerce, industry and trade) No. N-1 (SEPP N-1).
- Acoustic report prepared by SLR for Stage 1, entitled *Expert Witness Statement VCAT P682 2013, 11-13 Narelle Drive, Aspendale Gardens, SEPP N-1 Assessment of Noise to the Proposed Development and Recommendations for Noise Control* (Report No. 640.10687-R1R0), dated 11 November 2013.
- Acoustic report prepared by SLR for Stage 1, entitled *Response to VCAT Orders P682 2013, 11-13 Narelle Drive, Aspendale Gardens, SEPP N-1 Assessment of Noise to the Proposed Development and Recommendations for Noise Control* (Report No. 640.10687-R2, Draft 1), dated 31 January 2014.

## 1.2 Proposed Development and Sources of Noise on Site

Stages 1 and 2 of the residential development proposed to be constructed on the roof of the Aspendale Gardens shopping centre are shown in **Figure 1**. The existing shopping centre loading bay and mechanical plant are indicated on the aerial. Unloading of deliveries has been observed to routinely take place both in the loading bay and in the truck and public access drive through area (shown as dotted yellow line in **Figure 1**).

**Figure 1** Site and location of proposed residential development



Sources of noise on site and likely operating periods are listed in **Table 1**.

**Table 1: Sources of Noise**

Item	Location	Operation	Reference
Deliveries to main loading dock (unloading / refrigerated trucks)	Loading bay (south east)	7 am to 6 pm	IGA via NC&M report & City of Springvale Planning Permit 386/89. Observations and measurements of loading activities were made by SLR and are described in our report 640.10687-R1, 11 November 2013.
Waste collection	Loading bay (south east)	7 am to 8 pm Monday to Saturday 9 am to 8 pm Sunday and public holidays	EPA Publication 1254
Waste compaction	Loading bay (south east)	7 am to 10 pm Monday to Saturday 9 am to 8 pm Sunday and public holidays	IGA via NC&M report & City of Springvale Planning Permit 386/89
Refrigeration condenser units	Roof top plant area	24 hours	IGA via NC&M report



Item	Location	Operation	Reference
Packaged air conditioning units	Distributed over roof	Potentially 24 hours. The packaged unit P1 is assumed to operate during SEPP N-1 defined 'day' and 'evening' hours only.	City of Springvale Planning Permit 386/89

## 1 NOISE LEGISLATION AND PLANNING CONSIDERATIONS

### 1.1 SEPP N-1

Noise from industry and commerce is subject to the provisions of the State Environment Protection Policy (Control of noise from commerce, industry and trade) No. N-1 (SEPP N-1).

SEPP N-1 generally requires noise measurements to be made directly outside the residence potentially affected by noise from commerce or industry. Where windows are openable, the Policy requires noise to be measured outside the openable window. However, where there are no external balconies and where there are no openable windows in the façade facing the commercial noise source, measurements can be made inside.

Noise from any commercial, industrial or trade site is assessed for a 30 minute period and is adjusted for character, including tonality, intermittency, duration and location (for an indoor measurement). The adjusted noise level is compared with the noise limit to determine whether or not the premises comply with SEPP N-1.

The provisions of SEPP N-1 are enforced by the Environment Protection Authority using Noise Control Notices. Penalties may apply for non-compliance with the Noise Control Notice.

Under SEPP N-1 it is the responsibility of the noise emitter (ie. the commercial operator) to control noise emissions to within the noise limits.

### 1.2 Planning Considerations

Construction of new residences in the vicinity of existing commercial activity can result in SEPP N-1 non-compliance.

Where an exceedance of SEPP N-1 noise limits is predicted, modifications to the layout and orientation of the residential development, and/or cooperation with the commercial premises to control noise at the source, can be implemented.

SEPP N-1 compliance can generally be achieved at a proposed residential development where an exceedance is otherwise predicted by:

- Eliminating outdoor assessment locations. This can be achieved through layout design and/or by incorporating non-openable windows in affected facades, and
- Controlling commercial noise to indoors through façade upgrade treatments.

We note that it is also possible for developers to control noise to acceptable levels indoors through construction detailing and without installing non-openable windows (assuming windows are closed for assessment purposes). This approach is typically applied to new residences constructed on busy roads. If appropriately designed, the homes can provide future occupants with a good level of acoustic amenity indoors without taking away the option to open windows or to sit in open air balconies. While acoustically upgrading residential homes to achieve indoor design criteria does not prevent the commercial premises from exceeding SEPP N-1 noise limits, it can reduce the likelihood of complaint.

## 2 SEPP N-1 NOISE LIMITS

SEPP N-1 noise limits were determined in the SLR Report No. 640.10687-R1 and are reproduced below.

**Table 2 SEPP N-1 Noise Limits, Aspendale Gardens apartments**

	Day	Evenings and weekends	Night
Zoning Level, dBA	55	49	44
Background Noise Level, dBA L <sub>90</sub>	49 <sup>A</sup>	41	38 <sup>A</sup>
Background classification	Neutral	Neutral	Neutral
Noise Limit, calculation	Zoning Level	Zoning level	Zoning level
<b>Noise Limit (external), dBA</b>	<b>55</b>	<b>49</b>	<b>44</b>
Adjustment for internal limit, dB <sup>B</sup>	-15	-15	-15
<b>Noise Limit (internal), dBA</b>	<b>40</b>	<b>34</b>	<b>29</b>

NOTE A: Measured by NC&M and provided in report dated 10 August 2013.

NOTE B: The Policy calls for adjustments to be made to the measured commercial noise level, when the main sound transmission path is via a building partition (eg. window, wall or roof). However, it is common to apply the adjustment to the noise limit rather than the measured noise level, in order to obtain effective indoor noise limits. This is the approach adopted in this report.

The Policy calls for an adjustment of 15 dB for noise transmitted through a single glazed window, solid wall, ceiling or floor and 25 dB through a double glazed window. We have applied 15 dB through all partitions because (a) the application of the higher correction to double glazed windows is generally considered to be inconsistent and (b) any double glazing on this project will be installed in order to enable noise limits to be met, and it is illogical to lower the limit as a consequence of the efforts taken to reduce noise.

## 3 DELIVERY NOISE MODELLING AND ASSESSMENT

### 3.1 Overview

Noise from loading bay activities has been modelled using 3D noise modelling software (SoundPLAN version 7.3 using ISO 9613 prediction algorithms) in order to predict delivery noise levels at the façade of Stage 2 apartments that overlook the loading bay. The noise data and operational assumptions used in the model were determined as part of SLR's 2013 assessment and are detailed in both our earlier reports and are included in the calculation sheets in **Appendix A** of this report.

The modelling indicated that SEPP N-1 noise limits could not be met at the façade of apartments overlooking the loading area assuming the current layout and design.

Options for noise control that ensure the current businesses do not become in breach of SEPP N-1 include:

- Façade upgrade works to overlooking apartments indicatively entailing fully enclosed / non-openable balconies on the south east façade of apartments 37, 38 and 39 and elevated height balcony balustrades to other exposed apartments (balustrades up to 2.4 m high on upper level apartments).

OR

- Semi-enclosure of the loading bay area

The former option, and in particular the fully sealed 'balconies', does not provide for an appropriate level of non-acoustic amenity and for this reason was rejected by the Client.

Detailed noise modelling has instead been conducted relative to semi-enclosure of the loading area.



### 3.2 Noise Controls

The following noise control works have been included in the model:

- A roof over the loading bay and drive through area, extending to the property boundary.
- The south east side of the drive through (along the property boundary) has been modelled open to a height of 3 m. The upper section of this wall is clad.
- Minimum 1.2 m impervious balcony balustrades to all apartments on the south eastern façade of the development.

### 3.3 Modelled Noise Sources

The loading bay area has been modelled as a series of noise sources within an enclosure, with the predicted sound pressure level of typical loading bay activities and noise sources determined from our 2013 assessment. The noise levels within the enclosure are provided in **Table 3**.

**Table 3 Loading bay noise levels, Leq**

	Octave band sound pressure level, dB							Overall level, dBA
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	
Airbrakes				74	77	81	79	85
Compactor	53	54	53	49	45	39	36	51
Reversing beeper					79			79
Truck entrance	77	78	75	70	68	67	65	74
Truck idling	66	69	64	59	57	55	54	63
Truck reversing	77	78	74	69	67	66	65	74
Unloading outside	70	57	55	58	59	58	50	63

Truck departures have been modelled as a line source along the truck and public access route. The truck sound power data is provided in **Table 4**.

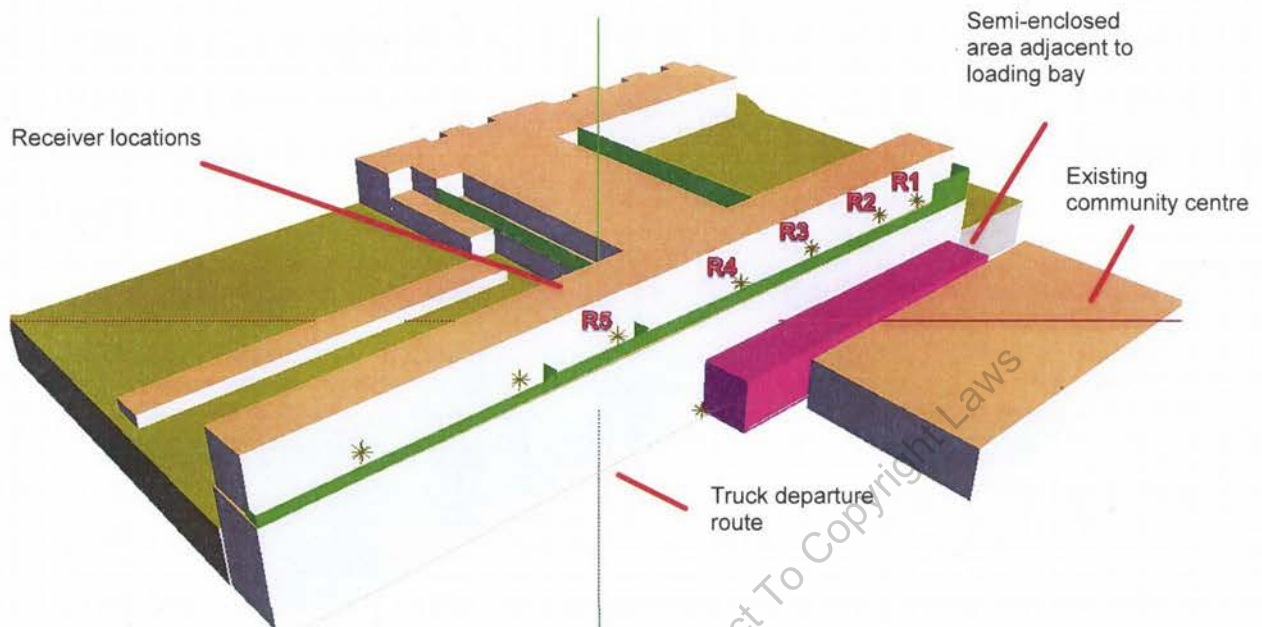
**Table 4 Truck departure sound power level, Leq**

	Octave band sound pressure level, dB							Overall level, dBA
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	
Truck departure	109	110	106	101	99	98	97	106

A 3-D image of the model is shown in **Figure 2**.



**Figure 2 3-D Image of noise model**



Details of calibration of the noise model are provided in the SLR Report 640.10687-R1.

### 3.4 Results

The outputs of the noise model have been used to calculate the SEPP N-1 Effective Noise Level at representative locations on the façade of the development. Results are summarised in **Table 5**. Details of calculations, including assumptions with regard to event duration and temporal frequency, are provided in **Appendix A**.

**Table 5 SEPP N-1 assessment of delivery noise**

	Period	Effective Noise Level, dBA	SEPP N-1 Noise Limit, dBA	Exceedance, dB
R1	Day	54	55	-
	Evening	42	49	-
R4	Day	54	55	-
	Evening	42	49	-
R5	Day	53	55	-
	Evening	42	49	-

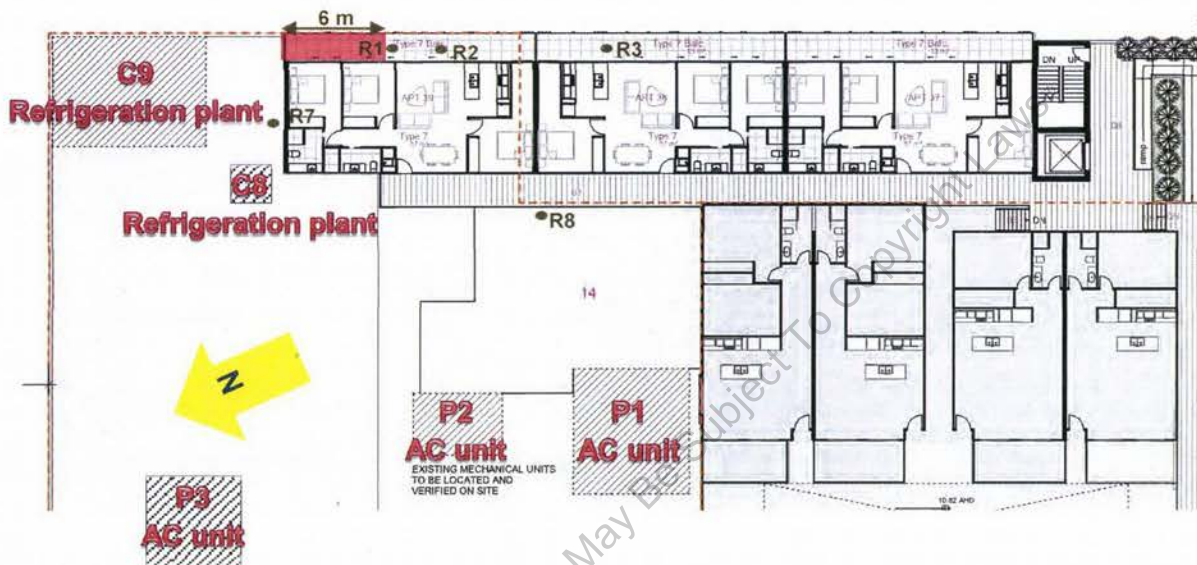
With the proposed semi-enclosure of the loading bay, compliance with SEPP N-1 during commercial deliveries is predicted at all receiver locations, during both the day and evening periods. Deliveries are not proposed to take place during the SEPP N-1 defined 'night' period.

## 4 MECHANICAL PLANT NOISE MODELLING AND ASSESSMENT

### 4.1 Overview

The 3D model has been used to predict noise from existing mechanical plant to the façade of the closest apartment (Nos 38 and 39 on Level 2 and 67 and 68 on Level 3). The plant and apartments are indicated in **Figure 3**.

**Figure 3 Mechanical plant decks**



Initial modelling indicated that the SEPP N-1 night noise limits could not be met on the balconies of apartments 39 and 68. For this reason, the north east corner of the balcony has been modelled as semi-enclosed.

### 4.2 Noise Controls

The following noise control treatments for balconies of apartments 39 and 68 have been included in the model:

- Solid full height partitions to the north east end of the balconies (closest to the refrigeration plant).
- Full height balustrades for the first 6 m of the balconies (approximate area shown in **Figure 3**).
- A solid roof over the first 6 m of the balcony of Apartment 68 closest to the refrigeration plant.

### 4.3 Modelled Noise Sources

Model inputs include:

- Sound power data for mechanical plant provided in **Appendix B**. All plant has been modelled as point sources.
- 24 hour operation for all mechanical plant.

Details of calibration of the noise model are provided in the SLR Report 640.10687-R1.

#### 4.4 Results

The outputs of the noise model have been used to calculate the SEPP N-1 Effective Noise Level at representative locations on the façade of the development. Results and details of calculations are provided in **Table 6**.

**Table 6 SEPP N-1 Assessments of plant noise**

Receiver	Period	Predicted Noise Level, dBA	Tonal Correction, dB <sup>1</sup>	Effective Noise Level, dBA	SEPP N-1 Noise Limit, dBA	Exceedance, dB
R1	Night	41	+2	43	44	-
R2	Night	40	+2	42	44	-
R3	Night	37	+2	39	44	-
R7	Night	64	+2	66	44	+22
R8	Night	62	+5	67	44	+23

NOTE 1: A +2 dB tonal correction has been applied to all balcony receiver locations as noise levels on the balcony are dominated by the refrigeration condenser unit labelled 'C9', which was subjectively assessed to be 'just tonal'. A +5 dB correction has been applied to R8 because noise at this location includes substantial contribution from P1, which was subjectively assessed to be clearly tonal.

Mechanical plant noise levels are predicted to comply with SEPP N-1 on the balconies of the nearest apartments provided that the balconies closest to the supermarket refrigeration plant are semi-enclosed.

Substantial exceedances are, however, predicted at the north eastern and north western facades of the affected apartments (R7 and R8). Due to the predicted exceedances there should be no openable windows in these facades, and building upgrade works will be required to ensure that the internal noise levels comply with SEPP N-1.

The predicted octave band noise levels at R7 and R8 are provided in **Table 7**. These levels have been used to determine the façade upgrade works required to achieve compliance with SEPP N-1 indoors.

**Table 7 Predicted octave band mechanical plant noise levels at apartment facades**

	Octave band sound pressure level, dB							Overall level, dBA
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	
R7	69	69	63	58	56	53	45	62
R8	69	73	63	60	58	54	48	64

Details of upgrades are provided in **Section 5**.



## 5 RECOMMENDATIONS

### 5.1 Loading Bay

- The apartments above the loading bay are to have a concrete floor slab, not less than 180 mm thick. If lightweight construction is proposed for this area, the design will need to be reviewed by an acoustical consultant.
- A roof is to be installed over the loading bay drive through area, extending to the property boundary. The extent of the roof is shown in **Appendix C**. The roof is to have a surface mass of not less than 9.4 kg/m<sup>2</sup> excluding fibrous insulation. Options include:
  - 1.2 mm thick steel OR
  - 0.42 mm steel in combination with 19 mm thick particle board
- The south east side of the enclosure is to be generally open except for the area above 3 m. Any part of the enclosure above 3 m is to clad with material that has a surface mass of not less than 4.2 kg/m<sup>2</sup> (eg. 0.6 mm thick steel).
- Fibrous insulation is to be installed to the underside of both the loading bay roof and the roof of the drive through area. The insulation is to comprise not less than 50 mm thick, 48 kg/m<sup>3</sup> fibrous insulation and can include a perforated foil facing for protection.

### 5.2 Balconies

The balconies of Apartments 39 and 68 are to include:

- Solid full height partitions with Rw ratings of not less than 45 dB to the north east end of the balconies (closest to the refrigeration plant). Eg. Wall Type 4 as described in **Table 8**.
- Full height balustrades with an Rw rating of not less than 32 dB for the first 6 m of the balcony (eg. 10 mm thick toughened glass). Approximate area shown in **Appendix D**.
- A solid roof over the first 6 m of the balcony closest to the refrigeration plant, with an Rw rating of not less than 32 dB (eg. 10 mm thick toughened glass). Approximate area shown in **Appendix D**. Options for the roof / ceiling include Ceiling Type 5 as described in **Table 8**, with cement sheet in place of plasterboard lining.

Balconies of all other apartments on the south east façade of the development, including apartments 33 to 39 and 51 to 58, are to be:

- Not less than 1.2 m high and
- Constructed of an impervious material with a surface mass of not less than 7 kg/m<sup>2</sup> (eg. glass).

### 5.3 Walkways / Passages

The walkways outside apartments 37, 38, 39, 56, 57 and 58 are to fully enclosed. Windows onto the plant deck are permissible, but are required to be non-openable. Refer to **Section 5.4** for wall and window details.

## 5.4 Façade Upgrade Works

### 1.2.1 Partition Types

Recommendations for façade treatments to control noise ingress from deliveries and mechanical plant to Stage 2 apartments are provided in **Table 8** to **Table 10**. The locations of proposed treatments are shown in **Appendices D** and **E**.

**Table 8 Wall Types**

Partition	Description	Acoustic Rating, dB
Wall Type 1	<ul style="list-style-type: none"> <li>2 x 9 mm thick compressed cement sheet externally (or cladding with a total density of not less than 34 kg/m<sup>2</sup>)</li> <li>Lightweight steel studs (BMT not greater than 0.55), OR timber or heavy steel studs with resilient furring channels, OR staggered or separate studs. Studs to form an overall cavity of not less than 250 mm.</li> <li>200 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>3 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 32 kg/m<sup>2</sup>).</li> </ul>	Rw = 72 Rw+Ctr = 62 SRI = 43 @ 100 Hz
WALL TYPE 2 NOT USED IN STAGE 2	<ul style="list-style-type: none"> <li>2 x 9 mm thick compressed cement sheet externally (or cladding with a total density of not less than 34 kg/m<sup>2</sup>)</li> <li>Lightweight steel studs (BMT not greater than 0.55), OR timber or heavy steel studs with resilient furring channels, OR staggered or separate studs. Studs to form an overall cavity of not less than 250 mm.</li> <li>200 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>2 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 21 kg/m<sup>2</sup>).</li> </ul>	Rw = 68 Rw+Ctr = 57 SRI = 39 @ 100 Hz
Wall Type 3	<ul style="list-style-type: none"> <li>1 x 9 mm thick compressed cement sheet externally (or cladding with a total density of not less than 17 kg/m<sup>2</sup>)</li> <li>Lightweight steel studs (BMT not greater than 0.55), OR timber or heavy steel studs with resilient furring channels, OR staggered or separate studs. Studs to form an overall cavity of not less than 150 mm.</li> <li>120 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>2 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 21 kg/m<sup>2</sup>).</li> </ul>	Rw = 60 Rw+Ctr = 48 SRI = 30 @ 100 Hz
Wall Type 4	<ul style="list-style-type: none"> <li>1 x 9 mm thick compressed cement sheet externally (or cladding with a total density of not less than 17 kg/m<sup>2</sup>)</li> <li>Lightweight steel studs (BMT not greater than 0.55), OR timber or heavy steel studs with resilient furring channels, OR staggered or separate studs. Studs to form an overall cavity of not less than 120 mm.</li> <li>90 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>1 x 13 mm thick fire rated plasterboard or 1 x 9 mm cement sheet internally (or alternative material with an overall surface density of not less than 10.5 kg/m<sup>2</sup>).</li> </ul>	Rw = 52 Rw+Ctr = 42 SRI = 23 @ 100 Hz



**Table 9 Roof Types**

Partition	Description	Acoustic Rating
Roof/Ceiling Type 1	<ul style="list-style-type: none"> <li>• 1 x 0.42 mm thick metal deck</li> <li>• 1 x 25 mm thick particleboard flooring or CSR Structaflor Bluetongue(or alternative cladding with a total density of not less than 17 kg/m<sup>2</sup>)</li> <li>• Joists.</li> <li>• Either wire hangers or furring channels fixed to clips to underside of joists, forming an overall cavity of not less than 250 mm</li> <li>• 200 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>• 2 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 21 kg/m<sup>2</sup>.</li> </ul>	Rw = 66 Rw+Ctr =55 SRI = 37 @ 100 Hz
Roof/Ceiling Type 2	<ul style="list-style-type: none"> <li>• 1 x 0.42 mm thick metal deck</li> <li>• 1 x 25 mm thick particleboard flooring or CSR Structaflor Bluetongue(or alternative cladding with a total density of not less than 17 kg/m<sup>2</sup>)</li> <li>• Joists.</li> <li>• Either wire hangers or furring channels fixed to clips to underside of joists, forming an overall cavity of not less than 250 mm</li> <li>• 200 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>• 1 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 10.5 kg/m<sup>2</sup>.</li> </ul>	Rw = 50 Rw+Ctr =48 SRI = 30 @ 100 Hz
Roof/Ceiling Type 3	<ul style="list-style-type: none"> <li>• 1 x 0.42 mm thick metal deck</li> <li>• Joists.</li> <li>• Either wire hangers or furring channels fixed to clips to underside of joists, forming an overall cavity of not less than 250 mm</li> <li>• 200 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>• 2 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 21 kg/m<sup>2</sup>.</li> </ul>	Rw = 52 Rw+Ctr =42 SRI = 24 @ 100 Hz
Roof /Ceiling Type 4	<ul style="list-style-type: none"> <li>• 1 x 0.42 mm thick metal deck</li> <li>• Joists.</li> <li>• Either wire hangers or furring channels fixed to clips to underside of joists, forming an overall cavity of not less than 250 mm</li> <li>• 200 mm thick fibrous insulation not less than 14 kg/m2 thick.</li> <li>• 1 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 10.5 kg/m<sup>2</sup>).</li> </ul>	Rw = 44 Rw+Ctr =34 SRI = 17 @ 100 Hz
Roof/Ceiling Type 5	<ul style="list-style-type: none"> <li>• 1 x 0.42 mm thick metal deck</li> <li>• Joists.</li> <li>• Either wire hangers or furring channels fixed to clips to</li> </ul>	Rw = 43 Rw+Ctr =32 SRI = 15 @ 100 Hz

Partition	Description	Acoustic Rating
	underside of joists, forming an overall cavity of not less than 250 mm	
	<ul style="list-style-type: none"> <li>• 100 mm thick fibrous insulation not less than 24 kg/m<sup>2</sup>.</li> <li>• 1 x 13 mm thick fire rated plasterboard internally (or alternative material with an overall surface density of not less than 10.5 kg/m<sup>2</sup>).</li> </ul>	

**Table 10 Window Types**

Partition	Description	Acoustic Rating
Window Type 1 (to be used in Wall Type 1)	<ul style="list-style-type: none"> <li>• 1 x 12 mm thick glass</li> <li>• 150 mm air cavity</li> <li>• 1 x 10.38 mm thick laminated glass</li> </ul> Frames to be constructed of not less than 3 mm thick aluminium or kiln dried hardwood.	Rw = 51 Rw+Ctr=46 SRI = 32 @ 100 Hz
Window Type 2 (to be used in Wall Type 2)	<ul style="list-style-type: none"> <li>• 1 x 10 mm thick glass</li> <li>• 150 mm air cavity</li> <li>• 1 x 6 mm thick glass</li> </ul> Frames to be constructed of not less than 3 mm thick aluminium or kiln dried hardwood.	Rw = 45 Rw+Ctr =41 SRI = 26 @ 100 Hz
Window Type 3 (to be used in Wall Type 3)	<ul style="list-style-type: none"> <li>• 1 x 10.38 mm thick laminated glass</li> </ul>	Rw = 34 Rw+Ctr = 32 SRI = 24 @ 100 Hz

### 1.2.2 Window Size

The windows described in **Table 10** are allowable provided that they do not exceed the dimensions given in **Table 11**. Any increase in window size should be subject to an acoustic review.

**Table 11 Maximum Window Dimensions**

Apartment	Space	Window	Maximum Glazed Area
Apartment 58	Bedroom	1	1 m <sup>2</sup>
	Common Passages	All	Maximum height = 0.6 m. Overall glazing to occupy no more than 10% of given facade.

### 1.2.3 Ventilation

Penetrations for ventilation are not permitted in acoustically upgraded facades. Any rooms with acoustically upgraded facades that do not open onto a courtyard, balcony or lightwell will require forced ventilation.

Options for forced ventilation include:

- Acoustically treated fully ducted air conditioning, OR
- Continuous low volume mechanical exhaust system and acoustically treated passive fresh air supply, OR
- Purpose designed fresh air supply such as the Acoustica 'Aeropac' ventilator.

Ventilation grilles, including bathroom and kitchen exhausts are not to compromise the acoustic integrity of the façade or roof / ceiling. Ceiling grilles are to be fitted with a minimum of 1.2 m long acoustically lined hard duct (subject to review following finalisation of duct dimensions).

#### 1.2.4 Lightwells

Lightwells in the vicinity of major noise sources will be required to be acoustically treated. There are, however, not currently any lightwells proposed for Stage 2 apartments.

## 6 SUMMARY

SLR have conducted an assessment of potential impacts from noise associated with the existing Aspendale Gardens shopping centre to Stage 2 of the apartment development proposed for above the centre.

Noise from both the loading bay area and the supermarket roof mounted mechanical plant has the potential to exceed SEPP N-1 limits and to compromise the acoustic amenity of future residents.

The following noise control works have been proposed in this report:

- The drive through area adjacent to the loading bay is to be fitted with a roof.
- The north east ends of balconies closest to the supermarket refrigeration plant are semi-enclosed.
- Apartment facades exposed to the greatest levels of noise from mechanical plant are acoustically upgraded and do not include openable windows.

If the above described works are undertaken it is my opinion that Stage 2 of the proposed residential development will not lead to the existing businesses becoming non-compliant with SEPP N-1.



**Appendix A: Calculations of Delivery Noise to Residential Receivers**

Receiver Location:

R1

Condition:

Proposed apartments

**Table A1: Daytime Assessment** (7 am to 6 pm weekdays, 7 am to 1 pm Saturday)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjust-ment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Semi trailer entering the property	106	1.8	Line	59.5	20	2	40	-16.5	43.0
Semi trailer leaving the property	106	1.8	Line	49.2	60	2	120	-11.8	37.4
Idling	98	1.8	Point	48.9	900	2	1800	0.0	48.9
Airbrakes	118	1.8	Point	66.9	2	2	4	-26.5	40.4
Semi reversing in loading dock	102	1.8	Line	59	30	1	30	-17.8	41.2
Reverse beeper	107	1.5	Line	62.8	15	1	15	-20.8	42.0
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	35.4	75	1	75	-13.8	21.6
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	47.2	75	2	150	-10.8	36.4
Compactor compacting cardboard	85	1.5	Point	37.1	5	3	15	-20.8	16.3
<b>TOTAL (rounded)</b>									<b>51.7</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>54</b>
Daytime Noise Limit									55
Daytime SEPP N-1 excess									-1

**Table A2: Evening Assessment** (6 pm to 10 pm all days, Saturday afternoon and Sunday daytime)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjust-ment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Rigid truck entering the property	98	1.8	Line	51.5	20	1	20	-19.5	32.0
Rigid truck leaving the property	98	1.8	Line	41.2	60	1	60	-14.8	26.4
Idling	90	1.8	Point	40.9	300	1	300	-7.8	33.1
Airbrakes	110	1.8	Point	58.9	2	1	2	-29.5	29.4
Rigid truck reversing into loading bay	94	1.8	Line	51	30	1	30	-17.8	33.2
Reverse beeper	104	1.5	Line	54.8	15	1	15	-20.8	34.0
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	27.4	50	1	50	-15.6	11.8
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	39.2	50	1	50	-15.6	23.6
Compactor compacting cardboard	85	1.5	Point	29.1	300	1	300	-7.8	21.3
<b>TOTAL (rounded)</b>									<b>40.0</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>42</b>
Evening Noise Limit									49
Evening SEPP N-1 excess									-7

**Appendix A: Calculations of Delivery Noise to Residential Receivers**Receiver Location: R3  
Condition: Proposed apartments**Table A3: Daytime Assessment** (7 am to 6 pm weekdays, 7 am to 1 pm Saturday)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjustment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Semi trailer entering the property	106	1.8	Line	58.2	20	2	40	-16.5	41.7
Semi trailer leaving the property	106	1.8	Line	58.3	60	2	120	-11.8	46.5
Idling	98	1.8	Point	47.6	900	2	1800	0.0	47.6
Airbrakes	118	1.8	Point	66	2	2	4	-26.5	39.5
Semi reversing in loading dock	102	1.8	Line	57.8	30	1	30	-17.8	40.0
Reverse beeper	107	1.5	Line	61.8	15	1	15	-20.8	41.0
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	35	75	1	75	-13.8	21.2
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	46.1	75	2	150	-10.8	35.3
Compactor compacting cardboard	85	1.5	Point	35.8	300	3	900	-3.0	32.8
<b>TOTAL (rounded)</b>									<b>51.9</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>54</b>
Daytime Noise Limit									55
Daytime SEPP N-1 excess									-1

**Table A4: Evening Assessment** (6 pm to 10 pm all days, Saturday afternoon and Sunday daytime)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjustment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Rigid truck entering the property	98	1.8	Line	50.2	20	1	20	-19.5	30.7
Rigid truck leaving the property	98	1.8	Line	50.3	60	1	60	-14.8	35.5
Idling	90	1.8	Point	39.6	300	1	300	-7.8	31.8
Airbrakes	110	1.8	Point	58	2	1	2	-29.5	28.5
Rigid truck reversing into loading bay	94	1.8	Line	49.8	30	1	30	-17.8	32.0
Reverse beeper	104	1.5	Line	53.8	15	1	15	-20.8	33.0
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	27	50	1	50	-15.6	11.4
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	38.1	50	1	50	-15.6	22.5
Compactor compacting cardboard	85	1.5	Point	27.8	300	1	300	-7.8	20.0
<b>TOTAL (rounded)</b>									<b>40.4</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>42</b>
Evening Noise Limit									49
Evening SEPP N-1 excess									-7



**Appendix A: Calculations of Delivery Noise to Residential Receivers**

Receiver Location:

R4

Condition:

Proposed apartments

**Table A5: Daytime Assessment** (7 am to 6 pm weekdays, 7 am to 1 pm Saturday)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjustment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Semi trailer entering the property	106	1.8	Line	56.3	20	2	40	-16.5	39.8
Semi trailer leaving the property	106	1.8	Line	59	60	2	120	-11.8	47.2
Idling	98	1.8	Point	45.5	900	2	1800	0.0	45.5
Airbrakes	118	1.8	Point	65.3	2	2	4	-26.5	38.8
Semi reversing in loading dock	102	1.8	Line	55.8	30	1	30	-17.8	38.0
Reverse beeper	107	1.5	Line	61	15	1	15	-20.8	40.2
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	35	75	1	75	-13.8	21.2
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	44.9	75	2	150	-10.8	34.1
Compactor compacting cardboard	85	1.5	Point	33.9	300	3	900	-3.0	30.9
<b>TOTAL (rounded)</b>									<b>51.0</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>53</b>
Daytime Noise Limit									55
Daytime SEPP N-1 excess									-2

**Table A6: Evening Assessment** (6 pm to 10 pm all days, Saturday afternoon and Sunday daytime)

Activity	Sound power level, dB	Source Height, m	Noise Model Source Type	Noise level at receiver location dBA, Leq	Expected duration (single event), seconds	No. events per 30 mins	Expected duration (all events), seconds	Duration adjustment dBA	Partial Effective Noise Level, dBA
<b>SUPERMARKET</b>									
Rigid truck entering the property	98	1.8	Line	48.3	20	1	20	-19.5	28.8
Rigid truck leaving the property	98	1.8	Line	51	60	1	60	-14.8	36.2
Idling	90	1.8	Point	37.5	300	1	300	-7.8	29.7
Airbrakes	110	1.8	Point	57.3	2	1	2	-29.5	27.8
Rigid truck reversing into loading bay	94	1.8	Line	47.8	30	1	30	-17.8	30.0
Reverse beeper	104	1.5	Line	53	15	1	15	-20.8	32.2
Unloading in bay, audible crashes, trolleys etc.	95	2	Area	27	50	1	50	-15.6	11.4
Unloading outside, audible crashes, trolleys etc.	99	1.5	Point	36.9	50	1	50	-15.6	21.3
Compactor compacting cardboard	85	1.5	Point	25.9	300	1	300	-7.8	18.1
<b>TOTAL (rounded)</b>									<b>39.7</b>
Adjustment for tone									2
Adjustment for impact									2
Adjustment for reflection									-2
Effective noise level									<b>42</b>
Evening Noise Limit									49
Evening SEPP N-1 excess									-7

## APPENDIX B: Octave Band Sound Power Levels of Plant Equipment

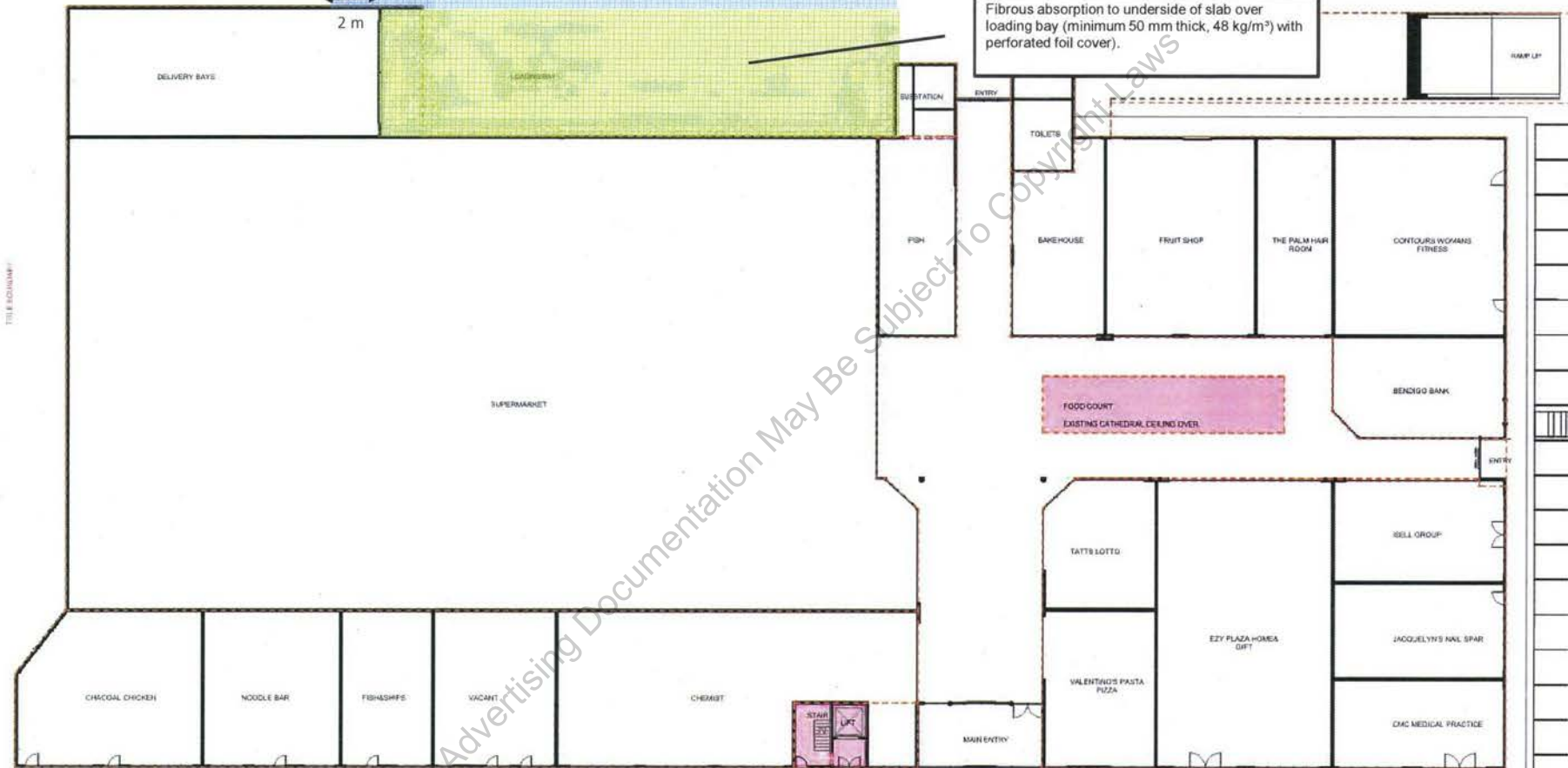
Noise source	Octave Band Centre Frequency							Overall Lw, dBA	Spectrum basis	Data derivation
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz			
Condenser units										
C08	84	85	76	75	72	73	64	78	C8	Measured at Aspendale Gardens
C09	94	93	87	82	80	78	71	86	C9	Measured at Aspendale Gardens
Packaged units										
P1	94	99	84	83	81	77	72	87	P1	Measured at Aspendale Gardens
P2	90	93	87	82	79	75	68	79	P3	Measured at Aspendale Gardens
P3	87	84	78	76	74	69	61	79	P3	Measured and provided by supplier
Compressors										
Stacks										
S11	85	84	78	78	74	73	70	80	S11	Measured at Aspendale Gardens


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Boundary side of enclosure above 3 m high to be clad with a material that have a surface density of not less than  $4.2 \text{ kg/m}^2$  (eg. 0.6 mm thick steel)

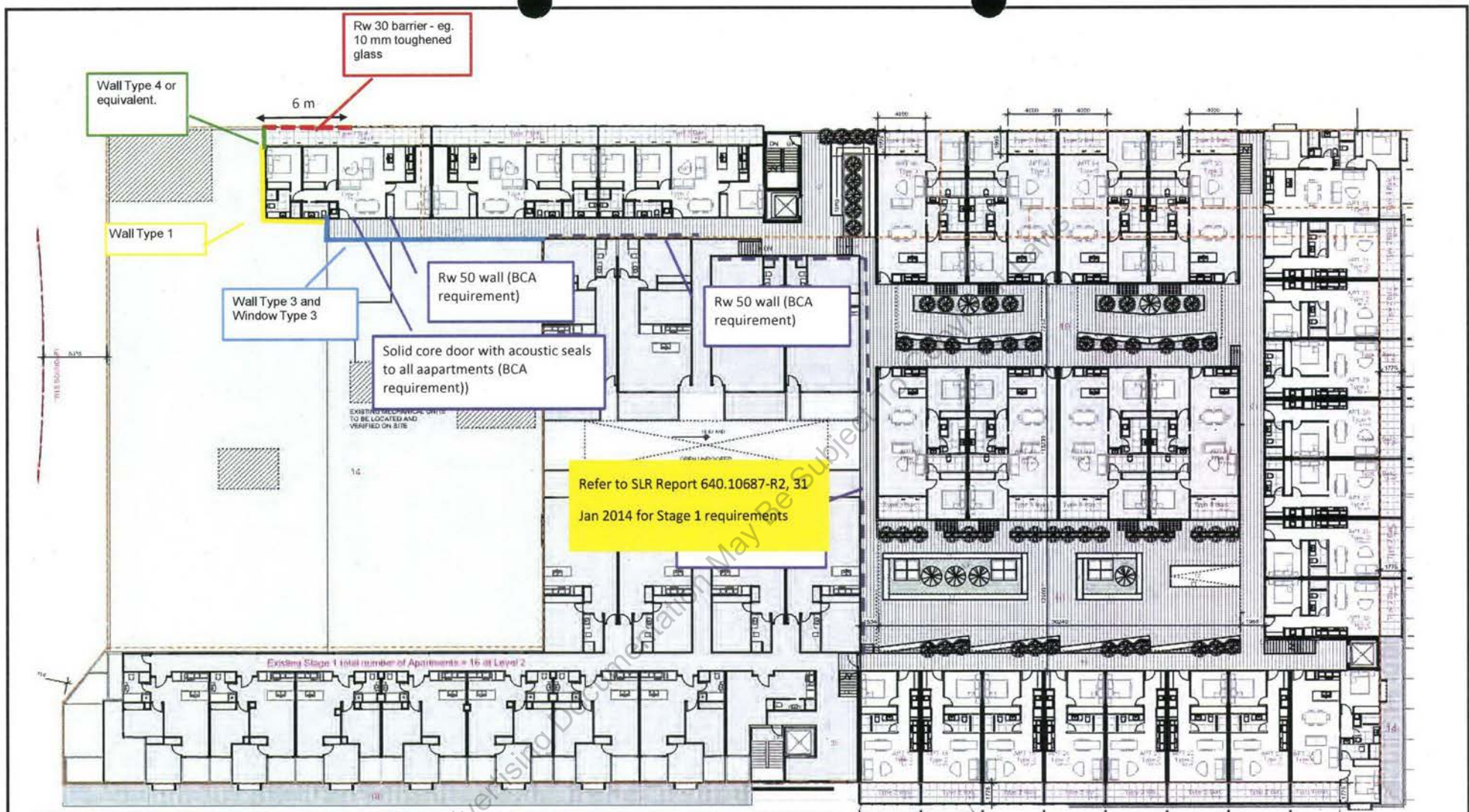
Minimum 1.2 mm thick steel roof over loading bay with absorption to underside of roof (minimum 50 mm thick,  $48 \text{ kg/m}^3$ ) with perforated foil cover

Fibrous absorption to underside of slab over loading bay (minimum 50 mm thick,  $48 \text{ kg/m}^3$ ) with perforated foil cover).



 <b>SLR</b> A.B.N. 29 001 584 612 Telephone: (03) 9249 9400 Facsimile: (03) 9249 9499				<b>TITLE Appendix C</b>  STAGE 2 11-13 Narelle Drive Ascendale Gardens Load Bay Acoustic Treatments Finnis Architects Dwg. TP4.2.			
Suite 6, 131 Bulleen Road Balwyn North, Victoria 3104							
DRAWN DW	DATE 19-Oct-15	SCALE NTS	FILE 640.10680 MARKUPS 20140128.XLS	640.10687	DRG. No.	REVISION	





#### Wall Type 1

WT1 - 2 x 9 mm thick compressed cement sheet externally, 250 mm airgap, 200 mm fibrous insulation, 3 x 13 mm FR pb internally.

#### Wall Type 2

WT2 - 2 x 9 mm thick compressed cement sheet externally, 250 mm airgap, 200 mm fibrous insulation, 2 x 13 mm FR pb internally.

#### Wall Type 3

WT2 - 1 x 9 mm thick compressed cement sheet externally, 150 mm airgap, 120 mm fibrous insulation, 2 x 13 mm FR pb internally.

#### Wall Type 4

WT2 - 1 x 9 mm thick compressed cement sheet externally, 120 mm airgap, 90 mm fibrous insulation, 1 x 13 mm FR pb internally.

NOTE: SEE ACOUSTIC REPORT FOR FULL DESCRIPTIONS



Telephone: (03) 9249 9400  
Facsimile: (03) 9249 9499

A.B.N. 29 001 584 612  
Suite 6, 131 Bulleen Road  
Balwyn North, Victoria 3104

TITLE Appendix D

STAGE 2 11-13 Narelle Drive Aspendale Gardens  
Wall Types and Barriers, Levels 2 & 3  
Finnis Architects Dwg TP4.2.

DRAWN  
DW

DATE  
19-Oct-15

SCALE  
NTS

FILE  
640.10687 MARKUPS  
20140128.XLS

640.10687

DRG. No.

REVISION







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Register Search Statement - Volume 10772 Folio 574

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~~REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958~~

VOLUME 10772 FOLIO 574

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LAND DESCRIPTION

Lot S2 on Plan of Subdivision 504835M.  
PARENT TITLE Volume 09868 Folio 214  
Created by instrument PS504835M 11/12/2003

REGISTERED PROPRIETOR

Estate Fee Simple  
Sole Proprietor  
BC39 PTY LTD of 43 PACIFIC AVENUE SUNSHINE BEACH QLD 4567  
AK141059T 18/01/2013

ENCUMBRANCES, CAVEATS AND NOTICES

CAVEAT AL205414N 04/07/2014

Caveator  
GESS MICHAEL RAMBALDI, ANDREW REGINALD YEO  
Grounds of Claim  
TRUSTEE OF THE BANKRUPT ESTATE OF THE FOLLOWING PARTIES UNDER THE BANKRUPTCY  
ACT 1966.  
Parties  
THE REGISTERED PROPRIETOR(S)  
Estate or Interest  
FREEHOLD ESTATE  
Prohibition  
ABSOLUTELY  
Lodged by  
ICA LAWYERS PTY LTD  
Notices to  
ICA LAWYERS PTY LTD of GROUND FLOOR 1192 TOORAK ROAD CAMBERWELL VIC 3124

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section  
24 Subdivision Act 1988 and any other encumbrances shown or entered on the  
plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE PS504835M FOR FURTHER DETAILS AND BOUNDARIES

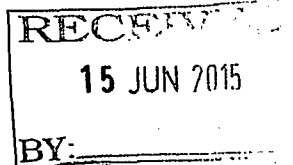
ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: OFFICE 1 LEVEL 1 11-33 NARELLE DRIVE ASPENDALE GARDENS VIC 3195



OWNERS CORPORATIONS

-----  
The land in this folio is affected by  
OWNERS CORPORATION 1 PLAN NO. PS504835M

DOCUMENT END

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PLAN OF SUBDIVISION		Stage No.	LV use only EDITION <b>2</b>	PS 504835M																									
<b>Location of Land</b> Parish: LYNDHURST Township: Section: Crown Allotment: 132 (PART)		<b>Council Certification and Endorsement</b> Council Name: CITY OF KINGSTON      Ref: KS197103 1. This plan is certified under section 6 of the Subdivision Act 1988. <del>2. This plan is certified under section 11(7) of the Subdivision Act 1988.</del> <del>Date of original certification under section 6: / /</del> <del>3. This is a statement of compliance issued under section 21 of the Subdivision Act 1988.</del> <b>Open Space</b> (i) A requirement for public open space under section 18 Subdivision Act 1988 has / has not been made. <del>(ii) The requirement has been satisfied.</del> <del>(iii) The requirement is to be satisfied in stage-</del> Council Delegate <del>Council seal</del> Date 21 / 11 / 2003 Re-certified under section 11(7) of the Subdivision Act 1988 Council Delegate Council seal Date / /																											
<b>Crown Portion:</b>  LV base record: VICMAP DIGITAL PROPERTY Title References: VOL 9868 FOL 214  Last Plan Reference: LOT 10N LP213811P Postal Address: CNR KEARNEY DRIVE & NARELLE DRIVE ASPENDALE GARDENS 3195  AMG Co-ordinates: E 334 670 approx. centre of plan) N 5 789 885      Zone 55		<b>Notations</b> <b>Staging</b> This is a staged subdivision Planning Permit No. _____ <b>Depth Limitation: DOES NOT APPLY</b> SUBDIVISION (REGISTRAR'S REQUIREMENTS) REGS 2011 APPLY TO ALL PARCELS CREATED IN PS504835M/D1 BOUNDARIES SHOWN BY THICK CONTINUOUS LINES ARE DEFINED BY BUILDINGS <u>LOCATION OF BOUNDARIES DEFINED BY BUILDINGS:-</u>  EXTERNAL FACE: BOUNDARIES MARKED E INTERIOR FACE: ALL OTHER BOUNDARIES  LOTS IN THIS PLAN MAY BE AFFECTED BY ONE OR MORE OWNERS CORPORATIONS FOR DETAILS OF ANY OWNERS CORPORATIONS INCLUDING PURPOSE, RESPONSIBILITY, ENTITLEMENT & LIABILITY SEE OWNERS CORPORATION SEARCH REPORT, OWNERS CORPORATION ADDITIONAL INFORMATION AND IF APPLICABLE, OWNERS CORPORATION RULES																											
<b>Vesting of Roads or Reserves</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Identifier</th> <th style="width: 50%;">Council/Body/Person</th> </tr> <tr> <td style="text-align: center;">NIL</td> <td style="text-align: center;">NIL</td> </tr> </table>					Identifier	Council/Body/Person	NIL	NIL																					
Identifier	Council/Body/Person																												
NIL	NIL																												
THE COMMON PROPERTY No 1 IS ALL THE LAND IN THE PLAN EXCEPT LOTS 1, 2A & 52  <b>Survey:-</b> This plan is based on survey To be completed where applicable. This survey has been connected to permanent marks no(s). In proclaimed Survey Area no. _____		<b>Easement Information</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">Easement Reference</th> <th style="width: 20%;">Purpose</th> <th style="width: 10%;">Width (Metres)</th> <th style="width: 10%;">Origin</th> <th style="width: 50%;">Land Benefited/In Favour Of</th> </tr> <tr> <td>E-1 E-5</td> <td>DRAINAGE &amp; SEWERAGE</td> <td>SEE DIAG</td> <td>LP213811P</td> <td>LOTS ON LP213811P</td> </tr> <tr> <td>E-1 E-5</td> <td>SEWERAGE</td> <td>SEE DIAG</td> <td>THIS PLAN</td> <td>SOUTH EAST WATER LIMITED</td> </tr> <tr> <td>E-1,E-2 E-4,E-5</td> <td>SEWERAGE</td> <td>SEE DIAG</td> <td>THIS PLAN</td> <td>SOUTH EAST WATER CORPORATION</td> </tr> <tr> <td>E-3,E-4 E-5</td> <td>POWERLINE</td> <td>SEE DIAG</td> <td>THIS PLAN</td> <td>UNITED ENERGY DISTRIBUTION PTY LTD</td> </tr> </table>			Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited/In Favour Of	E-1 E-5	DRAINAGE & SEWERAGE	SEE DIAG	LP213811P	LOTS ON LP213811P	E-1 E-5	SEWERAGE	SEE DIAG	THIS PLAN	SOUTH EAST WATER LIMITED	E-1,E-2 E-4,E-5	SEWERAGE	SEE DIAG	THIS PLAN	SOUTH EAST WATER CORPORATION	E-3,E-4 E-5	POWERLINE	SEE DIAG	THIS PLAN	UNITED ENERGY DISTRIBUTION PTY LTD
Easement Reference	Purpose				Width (Metres)	Origin	Land Benefited/In Favour Of																						
E-1 E-5	DRAINAGE & SEWERAGE	SEE DIAG	LP213811P	LOTS ON LP213811P																									
E-1 E-5	SEWERAGE	SEE DIAG	THIS PLAN	SOUTH EAST WATER LIMITED																									
E-1,E-2 E-4,E-5	SEWERAGE	SEE DIAG	THIS PLAN	SOUTH EAST WATER CORPORATION																									
E-3,E-4 E-5	POWERLINE	SEE DIAG	THIS PLAN	UNITED ENERGY DISTRIBUTION PTY LTD																									
<b>Legend:</b> A - Appurtenant Easement    E - Encumbering Easement    R - Encumbering Easement (Road)		LV use only Statement of Compliance / Exemption Statement  Received <input checked="" type="checkbox"/> Date 5 / 12 / 2003																											
SECTION 12(2) SUBDIVISION ACT 1988 APPLIES TO ALL THE LAND IN THIS PLAN		THIS IS A LAND VICTORIA COMPILED PLAN  FOR DETAILS SEE MODIFICATION TABLE HEREIN SHEET 1 OF 5 SHEETS																											
PRIOR & KELLY PTY. LTD. 936 HIGH STREET RESERVOIR 3073 TEL: 9478 6044 FAX: 9470 6509 A.B.N. 95 076 725 892																													
LICENSED SURVEYOR (PRINT) <u>TREVOR J. KELLY</u>  SIGNATURE    _____    DATE    / / REF 7513    VERSION    6 (7/10/2003)		DATE    / / COUNCIL DELEGATE SIGNATURE _____ Original sheet size    A3																											

**PLAN UNDER SECTION 32  
OF THE SUBDIVISION ACT 1988**

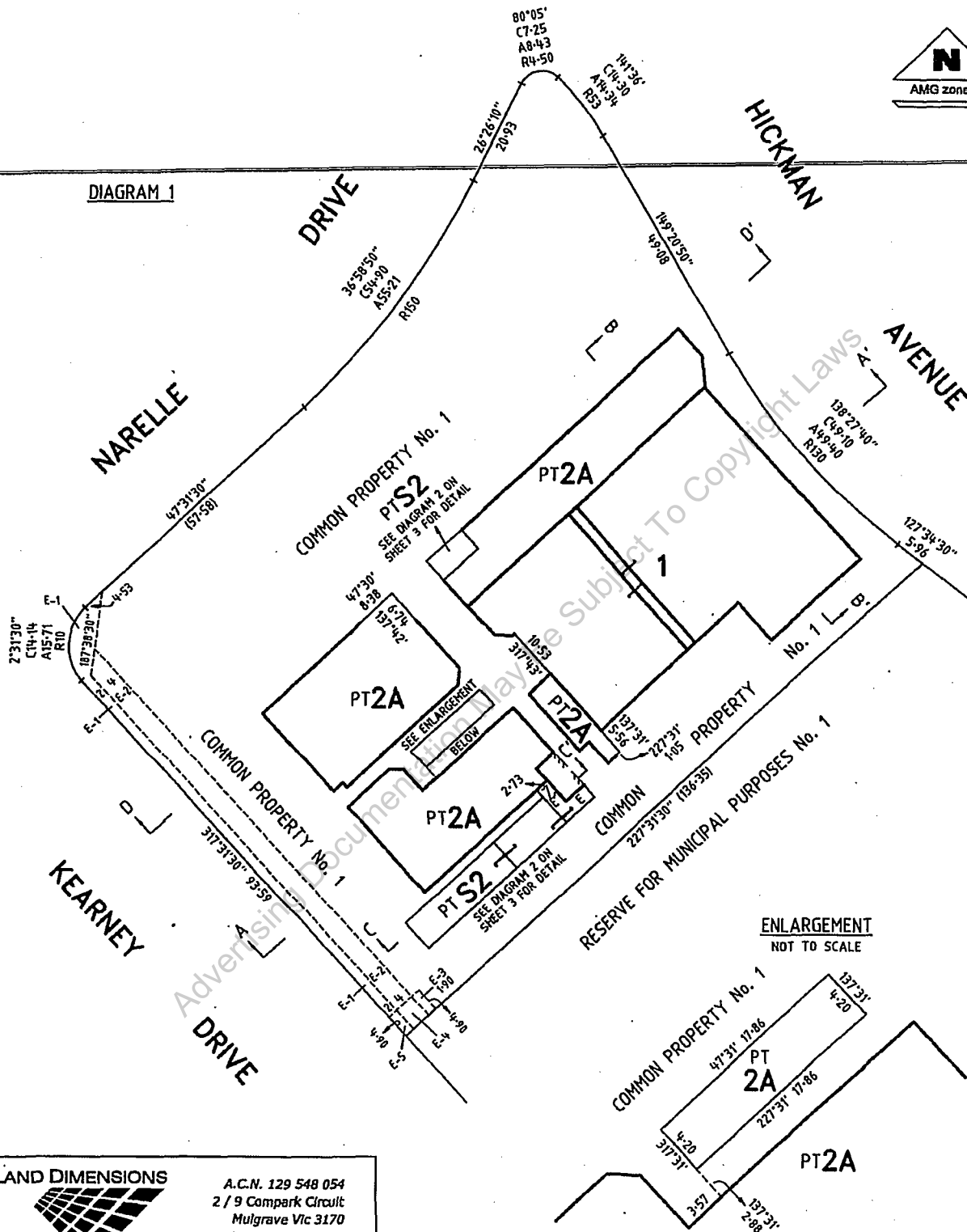
Stage No.

Plan PS504835M/D1

PS 04102/2013 \$1086.30 SA32PS



DIAGRAM 1



**LAND DIMENSIONS**



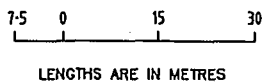
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2 / 9 Compark Circuit  
Mulgrave Vic 3170  
Tel: (03) 9560 3596  
Fax: (03) 9560 6719

ORIGINAL

SCALE

SCALE  
1:750

SHEET  
SIZE  
A3



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REF 11050  
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Sheet 2

DATE 1 / 8 / 2012

COUNCIL DELEGATE SIGNATURE

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**PLAN UNDER SECTION 32  
OF THE SUBDIVISION ACT 1988**

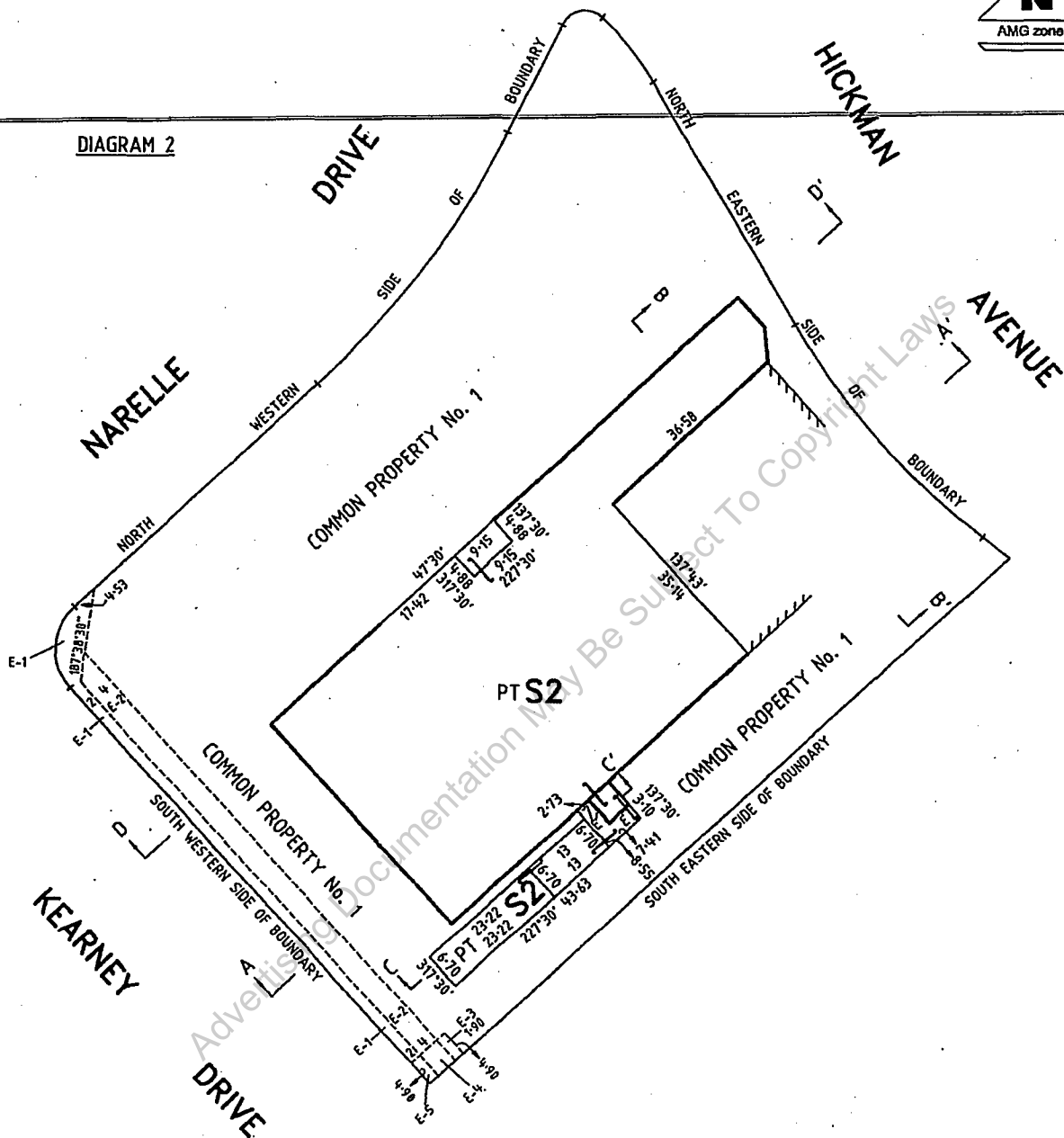
Stage No.

PS504835M/D1

04/02/2013 \$1086.30 SA32PS



DIAGRAM 2



**LAND DIMENSIONS**



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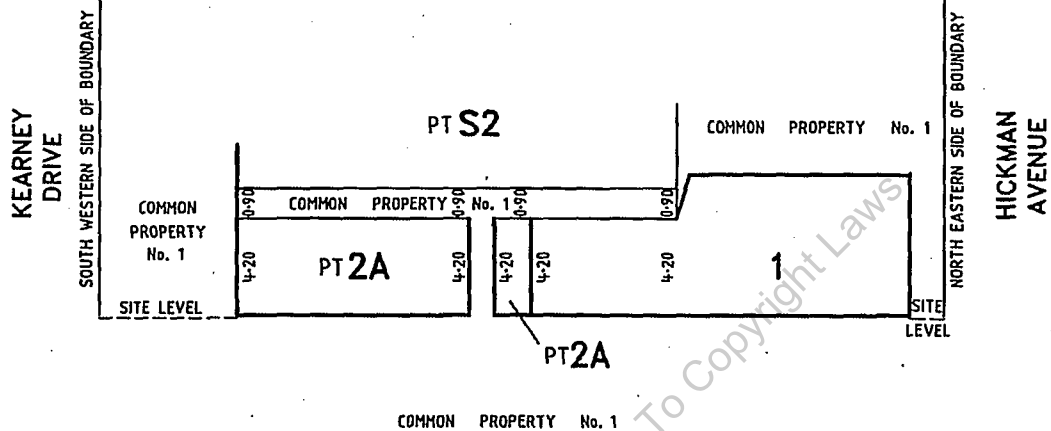
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**SECTION A-A'**

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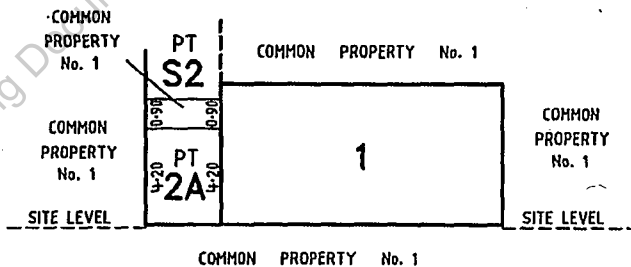


**SECTION B-B'**

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**LAND DIMENSIONS**



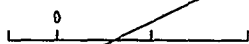
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**PLAN UNDER SECTION 32  
OF THE SUBDIVISION ACT 1988**

Stage No.

PS504835M/D1

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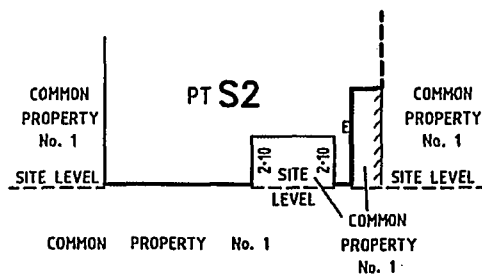


**SECTION C-C'**

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SHEET 2

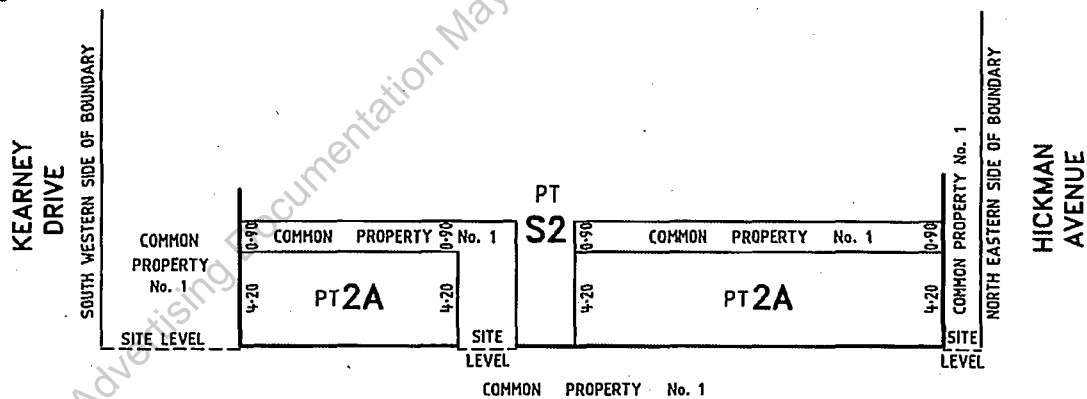


**SECTION D-D'**

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DIAGRAM 1  
SHEET 2



**LAND DIMENSIONS**



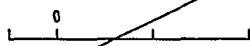
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Fax: (03) 9560 6719

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Sheet 5

DATE 1/8/2012

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## RECORD OF ALL ADDITIONS OR CHANGES TO THE PLAN

MASTER PLAN (STAGE 1) REGISTERED DATE 11/12/03 TIME 11:19

**PS504835M**

**WARNING: THE IMAGE OF THIS DOCUMENT OF THE REGISTER HAS BEEN DIGITALLY AMENDED.  
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## Department of Sustainability and Environment

### Owners Corporation Search Report

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OWNERS CORPORATION 1  
PLAN NO. PS504835M

The land in PS504835M is affected by 1 Owners Corporation(s)

Land Affected by Owners Corporation:

Common Property 1, Lots 1, 2A, S2.

Limitations on Owners Corporation:

Unlimited

Postal Address for Service of Notices:

CNR. KEARNEY DRIVE & NARELLE DRIVE ASPENDALE GARDENS VIC 3195  
PS504835M/D1 11/02/2013

Owners Corporation Manager:

NIL

Rules:

Model Rules apply unless a matter is provided for in Owners Corporation Rules.  
See Section 139(3) Owners Corporation Act 2006

Owners Corporation Rules:

NIL

Notations:

NIL

Entitlement and Liability:

NOTE - Folio References are only provided in a Premium Report.

Land Parcel	Entitlement	Liability
Common Property 1	0	0
Lot 1	500	500
Lot 2A	498	498



## Department of Sustainability and Environment

### Owners Corporation Search Report

Lot S2	2	2
Total	1000	1000

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Statement End.

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## Planning Submission

February 2015 – Version 1

### 11-33 Narelle Drive Aspendale Gardens

Proposal: Amendment to KP-519/2012, to increase the total number of apartments to 85 including variation to the carparking requirements of Clause 52.06 and associated works.



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11-33 Narelle Drive, Aspendale Gardens | 1

## Executive Summary

This application proposes the amendment of KP-519/2012 to propose the development of 62 additional apartments above the Aspendale Shopping Centre (for a total of 85).

The application also seeks a variation to the car parking requirements of Clause 52.06, however the variation relates solely to visitor parking because all resident parking is provided for at first floor level, utilising the ramp that was approved as part of the original permit.

We draw Council's attention to the fact that this is a re-submission KP-558/2014. It was determined by Council that it was more appropriate to amend KP-219/2012, rather than lodge a new independent application. Accordingly, upon registration of this application KP-558/2014 will be withdrawn and we request that Council transfer all relevant information to the appropriate file and also transfer the application fee.

The proposed development comprises three levels of residential living, including Carparking above the existing single storey section of the shopping centre. The design draws on the elements that been deemed to be positive by the Tribunal and ensures a high level of amenity is provided to all future residents. Furthermore a development of this nature has strong support of State and Local Policy.

A review of the Kingston City Council Planning Scheme and the Tribunal Decision for the original permit leads to the following key questions for consideration:

1. Is the type of development supported by planning policy?
2. Is the development satisfactory in terms of visual bulk?
3. Have Carparking and traffic matters been addressed?
4. Is the proposal an appropriate response to the character of this neighbourhood?
5. Will an appropriate level of internal amenity be achieved?

This report aims to address these questions and demonstrate that the proposal should receive Council's support on the basis that the development demonstrates full consistency with the objectives of the Kingston Planning Scheme; the parking and traffic related matters have been reviewed by expert traffic consultants and deemed to be appropriate; future residents will achieve a high degree of amenity and the development will not appear excessively bulky when viewed from surrounding properties or the road.

The application is submitted with the following supporting documents:

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- 1) Plans by Finnis Architects
- 2) Planning Submission by Nepear Planning Consultants
- 3) Waste Management Plan by Leigh Design Pty Ltd
- 4) Urban Design Report by Hansen Partnership
- 5) Sustainable Management Plan by Sustainable Development Consultants Pty Ltd. (to follow).

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# 1. The Proposal

We provide the following breakdown of the various elements of the proposal:

## Amendments to original design:

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The design of the original proposal is maintained, with the exception of some minor changes listed below:

- New door to north-eastern wall of first floor carpark to allow access to the proposed storage lockers to be constructed
- New stairs to first floor lobby adjacent to lift.
- New door adjacent to carpark 29 at first floor level to access lift, stair well, storage and rubbish bin storage area proposed on the central, south-east wall.
- Deletion of south-west facing windows from first floor lobby (adjacent to lift area).

## New elements

---

The application seeks to use the airspace above the western portion of the existing shopping centre to develop 62 new apartments. The details of design for each level are described below:

### First floor:

The majority of the first floor footprint is occupied by carparking, with 72 parking spaces being provided by a combination of at-grade and car stacker spaces.

Bike storage and general storage areas are also provided within the carparking area.

Sixteen apartments are also proposed at first floor level, with 14 of the 16 being one bedroom apartments referred to as Type 1 and two being two bedroom Type 2 apartments.

Each apartment is outward-facing, with a balcony.

### Second and third floors:

The second and third floors and comprised solely of residential apartments, with a total of 8 separate apartment styles proposed. This extent of variation in size and layout provides a positive diversity outcome.

The plans submitted with the application include a representation of each apartment style; therefore we do not seek to describe each within this submission.

To further describe the context of the development we include an extract from the Urban Design Memo prepared by Craig Czarny of Hansen Pty Ltd:

*"The proposal realises a further 62 shop top dwellings and emulates the pattern of development realised in Stage 1 with an elevated car parking level concealed behind a skin of residential apartments. Above the carpark are a further 2 levels of apartments oriented around courtyards. Apartments are configured with an outward facing orientation so as to ensure surveillance and aspect across the public realm. Given the substantive dimension of the interior of the site, a further run of apartments across 2 storeys are positioned centrally within the courtyard, enjoying aspect and access to each site.*

## 2. Planning Controls

The entirety of the site is within the Commercial 1 Zone (C1Z).

There are no overlays that affect the site

## 3. Permit Triggers

Planning approval is required for the proposal pursuant to;

- **Commercial 1 Zone**
  - Clause 34.01-4 (building or works on land in the C1Z)
- **Clause 52.06**
  - Reduction to the carparking rate
- **Clause 52.05 Advertising signage**
  - Category signage exceeding 8m<sup>2</sup>

*The amended application does not result in any new permit triggers*

## 4. Expectations

- It is our desire to work with Council to amend the permit. We seek to develop a high quality residential apartment development to compliment the apartments approved by the original permit, whilst enhancing the vibrancy of the shopping centre and ensuring amenity is provided for further residents.
- We are conscious that Council's Strategic Planners made comment on the original proposal and we appreciate the input that Council's Urban Designers have already had to this application and welcome continual communication with the Urban Design officer during the process.
- Further to the above we expect the application will be reviewed by Council's Development Engineers and Traffic Engineers.
- Upon Council reviewing our amendment application we ask Council to progress the matter to public notification. We ask Council to recognise that this amendment application responds to the matters raised within Council's RFI for the now-withdrawn new application that proposed Stage 2 as a separate application (KP-588/2014).

## 5. The Site

The Tribunal described the subject site and surrounds in the following manner within the Order for the Stage 1 development. We do not seek to change any aspect of the description:

*The Aspendale Gardens Shopping Centre (the shopping centre) is located at 11-33 Narelle Drive, Aspendale Gardens, in the south-eastern suburbs of Melbourne. It is a small-scale, freestanding shopping centre with a 'Supa IGA' supermarket and a small collection of convenience shops with a total ground floor leasable area of about 4,400 sq m. It is served by public transport in the form of a bus route along nearby Wells Road, and is within a 'town centre' that also comprises a primary school, a kindergarten, community centre and public open space.*

*The shopping centre is mostly a single storey structure. There is a centrally-located vacant second storey component with a floor area of about 1,100 sq m that could be used as an office.*

*The shopping centre is subdivided into three lots and common property. In general terms, lot 1 is at ground level and occupied by the supermarket. Lot 2A is also at ground level and is occupied by the convenience shops. Lot S2 is largely at the first floor level and located above part of lot 1 and all of lot 2A and is partly developed for the vacant office. Lot S2 includes, at ground level, stairs and a liftshaft and a linear section of the car park of about 7 m by 50 m. Common property No. 1 (the common property) includes the car parking, accessways and*



*internal common areas such as passages and services and a section about 1 m deep of airspace below lot S2.*

North-west elevation of existing shopping centre



Entry on north-west side of shopping centre



South-east elevation



Inside existing first floor area







The aerial photo of shopping centre and surrounding context (red line not intended to indicate anything related to this application).





## 6. Title Encumbrances

The title produced on 16 June 2014 demonstrates that Lot 2 on PS 504835M does not contain any restrictions or Agreements.

## 7. Sustainability in Design

To demonstrate that the proposal has given strong consideration to sustainability in design a Sustainable Management Plan by Sustainable Development Consultants Pty Ltd is being prepared. We also accept Councils invitation to work with the Moreland Energy Foundation. We agree that this project is a good candidate for the program and we have a consistent aim which is to maximise ESD outcomes.

## 8. State and Local Planning Policy Response

### Planning Assessment against State and Local Policies

This application proposes a residential development with the Commercial 1 Zone and sited within the bounds of an existing commercial development. The mixed-use outcome is supported by State and Local Policy and results in a proposal perfectly suited to the subject site located within the Aspendale Gardens Commercial Precinct.

### State Planning Policy

#### **Clause 11 Settlement**

The objective of this policy is;

*'To facilitate sustainable development that takes full advantage of existing settlement patterns, and investment in transport and communication, water and sewerage and social facilities'.*

The development of 85 dwellings within an established commercial precinct makes efficient use of existing infrastructure which furthers the objectives of this policy. The site has access to the reticulated sewerage, water and drainage systems and is close proximity to public transport and social facilities.

We are conscious that the site is not ideally serviced by public transport, however it is an Activity Centre and accordingly the provision of increased housing density directly within the activity centre responds to the Clause and is also entirely consistent with the objective of **Clause 11.01-2 Activity centre planning:**

*To encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural developments into activity centres which provide a variety of land uses and are highly accessible to the community.*

The mixed use outcome provided by the proposal is an ideal response to the objectives of the Clause as well as providing for a positive use of the site. The Tribunal's support for the original 23 apartments demonstrates that a mixed use outcome for the site is appropriate, therefore an application of this nature, which seeks to amend the proposal and further increase the residential density will hinge on the appropriateness of the built form rather than the appropriateness of a proposal for residential development within an Activity centre.

We submit that there is no question of policy support to use the land above the shopping centre for residential living because it allows previously unused air-space to provide for residential development within an activity centre in a manner that will activate the shopping centre and create a level of vibrancy that is lacking from the Aspendale Gardens commercial centre.

Further support for a proposal of this nature can be found at **Clause 15.01-1 Urban Environment**, which seeks to *'ensure new development or redevelopment contributes to community and cultural life by improving safety, diversity and choice, the quality of living and working environments, accessibility and inclusiveness and environmental sustainability'*.

The development meets the objectives of the Clause as the building design is unique to the area and introduces a form of residential living that will promote sustainability whilst providing a diversity of choice within an area where detached dwellings are the predominant form of housing.

The benefits of adding diversity to the existing, homogenous development pattern are many. It allows Aspendale Gardens to be an attractive living option to people who would like to reside in the area, but do not need a family-sized house. It also allows those who wish to down-size to remain in their local area, in a location that reduces reliance on travel because commercial facilities are found in the same location. This is consistent with a model of aging-in-place.

As discussed earlier in this submission the extent of policy support for a proposal of this nature means that we feel this amendment application will largely hinge on Urban Design matters accordingly it is important that we are conscious of **Clause 15.01-2 Urban Design Principles**. The objective of this policy is *'to achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties'*.

The amended proposal has been designed in a manner that will provide a visual connectivity between the existing shopping centre, the originally approved 23 dwelling development and the newly proposed section. The design does not seek to replicate the design detail of the existing shopping centre, nor does it draw all its inspiration from the 'Stage 1' section, however the design detail ensures that all these elements are pulled-together to ensure the result is 'one building' and not a structure that looks like it has been built in-parts.

The net result will be a significant improvement to the aesthetics of the shopping centre and a contemporary apartment development that responds to the expectation of modern urban design standards.



We also advise Council that we have worked closely with Craig Czarny and Sandra Rigo of Hansen Partnership Pty Ltd, who have assisted Finnis Architects create a design that has ensured Urban Design principles have been at the forefront of the proposal.

This submission is accompanied by an Urban Design Memo from Hansen Partnership, which includes the following conclusion:

*Given the above comments, we strongly support the Stage 2 design proposition as one that is well crafted, considered and cognisant of its context, which demonstrates successful coexistence with existing operations of the retail centre and the approved Stage 1 development.*

**Clause 16.01-2 Location of residential development** seeks "to locate new housing in or close to activity centres and employment corridors and at other strategic redevelopment sites that offer good access to services and transport". The strategy to do this is to "increase the proportion of housing in Metropolitan Melbourne to be developed within the established urban area, particularly at activity centres, employment corridors and at other strategic sites, and reduce the share of new dwellings in greenfield and dispersed development areas".

The ability to provide additional housing in Aspendale Gardens, without affecting environmental systems or the neighbourhood character of existing residential areas should be encouraged by Council. The apartment style development provides a diversity of housing choice that will allow residents to enjoy the benefits of suburban living without being restricted to purchasing a detached dwelling on its own lot.

#### Local Planning Policy

**Clause 21.05** recognises that Aspendale Gardens has accommodated significant housing growth in recent decades and seeks to identify future residential opportunity sites. The proposed development is entirely consistent with the objective of how future housing growth can be accommodated:

*"In future, all large residential opportunity sites will provide an integrated mix of lot sizes and housing types, and medium density housing will become a more important housing element on these sites".*

The development of additional housing within the Activity Centre identified by Clause 21.05 meets many objectives of the Clause as follows:

- Encourage residential development within activity centres via shop-top housing and mixed use developments,
- *Support innovative residential infill development on former industrial sites adjacent to established residential areas, and on other mixed use or traditionally non-residential sites where appropriate.*
- *Ensure development plans are prepared and implemented for all large residential opportunity sites to address the provision of a diversity of housing opportunities and to ensure that other site and contextual issues are addressed.*

- Promote increased housing diversity in residential areas that are within convenient walking distance of public transport and activity nodes (increased housing diversity areas). Such areas will accommodate a variety of medium density housing types and layouts at increased residential densities, responding to the established but evolving urban character.
- Promote new residential development which provides a high standard of amenity and quality of life for future occupants.
- Promote medium density housing development in close proximity to public transport facilities, particularly train stations.
- Require the provision of carparking to satisfy the anticipated demand having regard to average car ownership levels in the area, the environmental capacity of the local street network and the proximity of public transport and nearby on and off street car parking.
- To promote opportunities for quality medium density housing in locations with good access to public transport/activity nodes
- Facilitating shop-top housing and mixed use development within activity centres (emphasis added)

#### Clause 21.06 Retail and Commercial Land Use

Council has identified a need to enhance and promote mixed use development within existing Activity Centres, therefore the proposal is not only reasonable in the context of Local Policy, it is encouraged:

*"There is a need for new supermarket investment, particularly in the central and southern sections of the municipality, to provide existing communities with greater choice and encourage higher utilisation of activity centres. Diversification of land use activity to incorporate residential/mixed use activity and the development of specialist niche market strengths remains one of the key challenges to be met by centres across the identified activity centre hierarchy".*

Further encouragement for the mixed use proposal can be found in the following objectives and strategies of the Clause:

- Promote mixed use precincts around key activity centres which encourage a broader range of cultural, social, commercial and higher density housing opportunities to complement retail functions of activity centres and enhance their economic vitality.
- Opportunities to enhance retail mix, land use diversification (including medium density development opportunities) and development of specialist niche markets.

#### Clause 22.11 Residential Development Policy

Further support is provided for the development of well-considered residential and mixed use development within activity centres and close to public services as follows:

- Encourage increased residential densities and a wider diversity in housing types and sizes in areas which are within convenient walking distance of public transport and activity centres.



*These areas are identified for 'increased housing diversity' on the Residential Framework Plan within the MSS.*

- *Ensure that adequate on-site car parking is provided to meet the needs of future residents and visitors and sited to reduce its impact on the streetscape.*

## Zone

### Clause 34.01 Commercial 1 Zone

The proposal is entirely consistent with the purpose of the Commercial 1 Zone:

- *To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.*
- *To provide for residential uses at densities complementary to the role and scale of the commercial centre.*

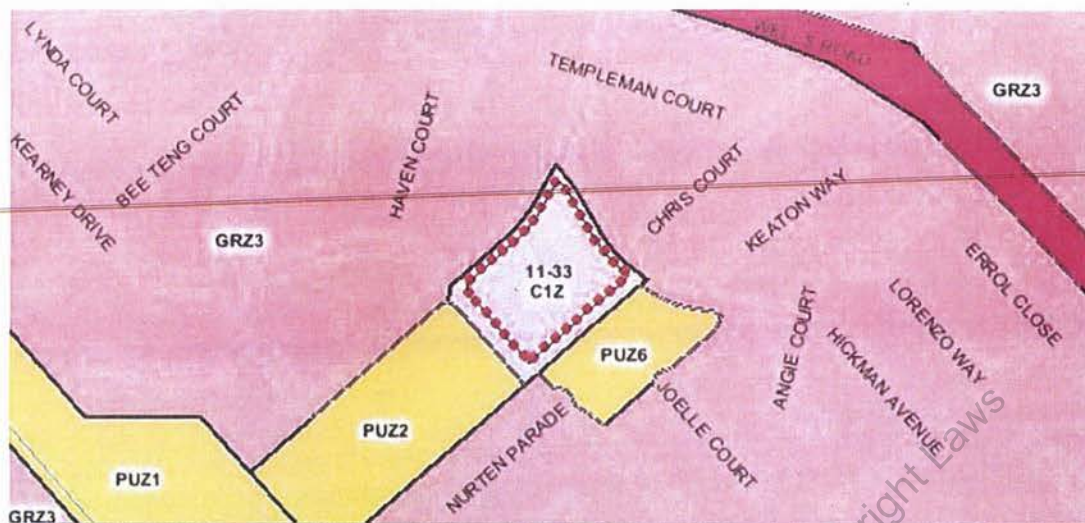
Furthermore we are conscious of the Decision Guidelines of the Commercial 1 Zone and respond to each below:

### General

- *The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*
- *The interface with adjoining zones, especially the relationship with residential areas.*

This submission provides an assessment of the Amendment against State and Local Policy and demonstrates that the proposal is entirely consistent with the objectives of the SPPF, LPPF and MSS.

The matter of the proposals interface with the adjoining zones has been addressed within the Hansen Urban Design response whereby there is an acknowledgement that the sites location immediately adjacent to the Council owned land to the south-east that is used for indoor and outdoor recreation purposes needs to be considered. Accordingly the south-eastern elevation of the has been treated – and setback – in a manner that ensures the development will not present to the recreation areas in an excessively bulky manner.



#### Use

- The effect that existing uses may have on the proposed use.
- The drainage of the land.
- The availability of and connection to services.
- The effect of traffic to be generated on roads.
- The interim use of those parts of the land not required for the proposed use.

We submit that the proposal does not trigger a use permit.

*Semmens v East Gippsland SC (Red Dot) [2006] VCAT 683 (21 April 2006)* states that "the reference in the condition to 'any **frontage**' opposite the particular use of dwelling leads me to conclude that this condition should be read as 'access to dwelling at the road alignment at the front of a lot at ground level must not exceed 2m'.

This position is consistent with the expert opinion provided by Hansen Pty Ltd at the original VCAT Hearing.

Notwithstanding the above, the submission responds to each of 'use' decision guidelines.

The proposed use will have a positive effect on the existing shopping centre. We acknowledge that there may be some, modest short-term impact during the construction phase, however a future construction management plan will ensure minimal disruption to the shopping centre functions.

In the long term the fact that residents of 85 apartments will live directly above the shopping centre will assist in activating the centre and revitalise the commercial activities. This is important because the centre is currently operating below capacity, with a number of stores available for lease so any activation of the centre will assist its long term viability.

Furthermore the apartments are to be constructed above the shopping centre with the ground floor area to remain almost untouched. This will ensure that approval of the development will not prioritise



residential development over commercial operation, rather it will promote a mixed use outcome where both uses can operate in harmony, in a symbiotic relationship.

#### Building and works

- *The movement of pedestrians and cyclists, and vehicles providing for supplies, waste removal, emergency services and public transport.*
- *The provision of car parking.*
- *The streetscape, including the conservation of buildings, the design of verandahs, access from the street front, protecting active frontages to pedestrian areas, the treatment of the fronts and backs of buildings and their appurtenances, illumination of buildings or their immediate spaces and the landscaping of land adjoining a road.*
- *The storage of rubbish and materials for recycling.*
- *Defining the responsibility for the maintenance of buildings, landscaping and paved areas.*
- *Consideration of the overlooking and overshadowing as a result of building or works affecting adjoining land in a General Residential Zone, Neighbourhood Residential Zone, Residential Growth Zone or Township Zone.*
- *The availability of and connection to services.*
- *The design of buildings to provide for solar access.*
- *The objectives, standards and decision guidelines of Clause 54 and Clause 55. This does not apply to a development of five or more storeys, excluding a basement.*

The application to support the proposed amendment includes:

- fully detailed architectural plans
- an Urban Design response by Hansen Partnership
- a Waste Management Plan by Leigh Design Pty Ltd.
- a pending Sustainable Management Plan by Sustainable Development Consultants Pty Ltd
- a traffic impact report by Ration Pty Ltd.

Accordingly we are satisfied that all the submission requirements for a buildings and works application have been met.

## 9. Further consideration

#### VCAT REFERENCE NO. P682/2013

The VCAT order relating to the development of 23 apartments above the central and north western portion of the shopping centre was clear in its support for the development concluding as follows:

- 1 *This proposed development epitomises current policy encouragement for the achievement of urban consolidation and increased housing in activity centres.*

- 2 *This policy encouragement is found in equal measures in both the State and local planning policy frameworks, and so reflects the strategic intent of both State and local government to see the achievement of more housing in activity centres such as this.*
- 3 *Policy is clear in its intent that such new housing is not to reflect the style and scale of the detached housing found in the surrounding residential hinterland. Instead the new housing in activity centres is to provide for different forms of housing, that provide for smaller and aging households, which are more affordable to a broader range of households, and which are more energy efficient.*
- 4 *Additional housing is to consist of medium and higher density housing, and therefore be a more intensive development of a larger scale.*
- 5 *As we see all of these policy imperatives being achieved in the proposal, it is clear that this form of development is worthy of support.*

The Tribunal's order should leave Council in no doubt that the Stage 2 development is also appropriate for the site. Whilst the number of apartments will increase from what was previously supported the context is the same. The proposals draws on State and Local Policy support; design and amenity concerns have been considered and the positive elements of the design identified by the Tribunal for Stage 1 have been replicated for Stage 2 ensuring a similar – positive – amenity and design outcome.

We recognise that prior to the Tribunal's order for Stage 1 that Council did not agree the density of development and the bulk of the development was appropriate, however we would expect Council will re-evaluate its position given such overwhelming support by the Tribunal.

**Council's Strategic Planners previous contended the following:**

*What is the role of Aspendale Gardens and Aspendale Gardens Shopping Centre (the Centre) Neighbourhood Activity Centre (NAC) in accommodating residential growth in the municipal context?*

*In the Kingston Residential Land Use Framework Plan, Aspendale Gardens is indicated as an area for promotion of Incremental Housing Change. The type of housing change anticipated in these areas will take the form of extensions to existing houses, new single dwellings or the equivalent of new two dwelling developments on average sized lots. The Municipal Strategic Statement (MSS) states that the 'existing single dwelling character of these areas is to be retained'. However, the MSS also identifies opportunities for higher densities within Kingston's activity centres, particularly in the form of shop-top housing and mixed use developments. While there may seem to be an inherent contradiction in the above policies, it should be noted that different activity centres have different development capacities and the MSS goes on to say that the differential capacity of local areas to accommodate different types and rates of housing change should be taken into account. Therefore, the application of this policy to a small Neighbourhood Activity Centre (NAC) like Aspendale Gardens will not be the same as applying it to other NACs like Highett.*

VCAT clearly disagrees with this assessment and responded as follows:



20. The Kingston Local Planning Policy Framework (LPPF) identifies the shopping centre as a Neighbourhood Activity Centre.<sup>1</sup> As such it is subject to policy at a State and local level that seeks to encourage urban consolidation within Neighbourhood Activity Centres. The parties opposing the development argued that as the shopping centre is a very small Neighbourhood Activity Centre, it should not be subject to the same pressures to contribute to urban consolidation. We are not persuaded by this submission, principally because policy does not differentiate between the urban consolidation contributions to be made between large and small Neighbourhood Activity Centres.

22. The Kingston LPPF also seeks to direct medium and higher density housing to preferred locations which are referred to as Increased Housing Diversity Areas. These areas are primarily located along the Frankston Rail corridor, and so do not include any land in Aspendale Gardens. We do not consider the presence of these areas to diminish the role to be played by activity centres located outside of the Increased Housing Diversity Areas. The important role to be played by activity centres in providing for urban consolidation is well entrenched in both State and local policy, and the intent for other areas to play a similar role does not decrease the importance of appropriate sites within activity centres as and when they become available.

27. In contrast the area surrounding the shopping centre is included in an Incremental Change Area. The policy intents for such areas are—

*The type of housing change anticipated in these areas will take the form of extensions to existing houses, new single dwellings or the equivalent of new two dwelling developments on average sized lots. The existing single dwelling character of these areas is to be retained.<sup>2</sup>*

*Promote lower density housing in established suburban areas that do not have direct access to activity/transport nodes and "encourage" only incremental change in housing density (incremental housing change areas). Such areas will retain their predominantly single dwelling character and incremental change will occur in the form of single dwellings or the equivalent of dual occupancy developments on average sized lots.<sup>3</sup>*

28. We adopt these strategies as being appropriate for the residential areas that surround the shopping centre. However the commercially zoned land within the Neighbourhood Activity Centre itself presents an altogether different opportunity for an alternative form of housing that is not otherwise available in the surrounding residential areas. This is evident from the same policy as that quoted above, which seeks to encourage shop-top housing in activity centres. Such housing will be affordable, and a more diverse offering for different household types when compared to the surrounding predominantly detached housing. It will also allow the opportunity for existing elderly members of the community to move into a more appropriate form of housing within their own community, that requires a much lower level of maintenance.

Is the development satisfactory in terms of visual bulk?

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Council's assessment of Stage 1 also critiqued the extent of built form and how it would affect the characteristics of the area. The Tribunal was string in its criticism of Council's approach to this assessment:

29. *There can be no doubting the fact that this proposed development is entirely different in form, scale and height to the surrounding predominantly single storey detached housing stock. But this should not be a surprising outcome of itself, given the role of the review site as an activity centre comprising predominantly a retail shopping centre. Indeed the same could be said of the existing shopping centre building on the land, which is of a scale, including its height, that is entirely foreign to the examples of detached housing found in the surrounding community. Likewise the adjoining community centre, and the nearby primary school, are different building forms again.*
30. *One cannot reasonably expect the form of development in a shopping centre to be reflective of the built form found in the surrounding single storey detached housing. Shopping centres perform certain functions that require a larger floorspace, and increased height clearances, that mean that bigger forms of a larger scale are inevitable.*
31. *In this case the shopping centre already contains a second floor that, with its commercial floor heights, is only 1.3 metres shorter<sup>4</sup> than the proposed apartments. Therefore the proposal presents a very modest increase in height over that which is already existing in this activity centre.*
32. *In some ways we find that the argument put by the Council, and supported by Mr Carney, to be somewhat absurd. One cannot reasonably expect that new shop top housing, within an activity centre, as encouraged by both State and local planning policy, to reflect the scale, forms and rhythm of the surrounding single storey housing stock. As was put by Mr Czarny under cross examination, that would result in a series of detached houses sitting atop the shopping centre each with their own entries and pitched roofs.*

We acknowledge the proposed stage 2 development is higher than Stage 1; however it increases the height by only one storey, or 2.40m higher than the sign approved. This modest increase to the height supported for Stage 1 will have no adverse effect on the surrounding area and the visual outcome will be a positive for the shopping centre as it will help 'complete' the shopping centre and provide for a development that sits comfortably within the context of its setting. As the tribunal identified the site is "generally well separated from the surrounding housing stock. It is surrounded to its north-west by a large car park and landscaping, to its south-west by a primary school, and a community centre to its south-east. The context of these interfaces will ensure that views to built form will either be across a large landscaped car park, or adjacent to other non-residential building forms, in the case of the school and the community centre.



We therefore find that the relationship of this building in those contexts is appropriate, and assisted by the level of articulation and range of building materials particularly used in its elevation to Narelle Drive”.

Further to the above Hansen Pty Ltd provided the following statement relating to the proposed ‘building massing’:

*Finally, we note that the presentation of outward facing apartments across the parkland and car park each have a high degree of transparency with inset balconies and glazed apartment frontages, with vertical timber screening in selected locations. We believe that the form strikes an appropriate balance of solid and transparent elements which contrasts with the robust sheer profile of the shopping centre parapet form. It represents a sound massing response in the context of integrated mixed use development.*

#### Have Carparking and traffic matters been addressed?

---

Ratio Traffic Consultants have completed a thorough traffic assessment and provided the following conclusions:

- The proposed provision of 77 on-site parking bays will cater for the typical resident and visitor parking demands generated by the proposed development. Any overflow in visitor demands that may occur could be accommodated within the shopping centre car park.
- The resident and visitor bicycle parking provisions meets the requirements of the Planning Scheme with dimensions in accordance with Australian Standards.
- The proposed parking layout and associated access arrangements have been suitably designed and are in accordance with the Planning Scheme and AS/NZS2890.1:2004 requirements.
- The development is expected to generate about 310 vehicle trips per day, with about 31 trips per hour during peak hours, or one trip every two minutes or so. This traffic will be dispersed onto Kearney Drive in the first instance and then the adjacent road network and is not expected to create any adverse traffic safety or capacity problems.

We acknowledge that the traffic report will be reviewed by Council’s traffic engineers and request open dialogue during the planning assessment with respect to traffic related matters, however we are entirely comfortable that the vehicle movement and Carparking details are appropriate.

#### Will an appropriate level of internal amenity be achieved?

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The primary area of consideration during the Stage 1 assessment related the provision of daylight to living areas of some apartments. The design of Stage 2 was conscious of the Tribunal’s consideration on this matter and accordingly large light courts have been included for all ‘internal’ apartments whilst the apartments around the exterior of the development have access to balconies.

Hansen Pty Ltd closely examined the design of each apartment and advised that

*In terms of the building's internal amenity, we are generally satisfied with the configuration of the apartments within the proposal; however there are a series of refinements that we would suggest could be improved in particular instances.*

The improvements suggested relate to a select few bedrooms at level 3 being improved with some reconfiguration to allow improved penetration of natural light. Should Council agree with Hansen the appropriate reconfiguration can be made, but we also suggest that the matter could be addressed via a condition of permit as it is a minor matter.

#### Does the design protect the amenity of future residents with respect to acoustic matters?

The Stage 1 proposal supported by the Tribunal had to be closely examined against any possible amenity impacts as a result of noise emissions from the supermarket's plant equipment and the delivery area. VCAT identified the noise emitting areas of the existing supermarket as follows:

##### Analysis – Acoustics

- 59 *Both acoustic experts agree there are three existing noise sources in the shopping centre with potential to result in the shopping centre becoming SEPP N-1 non-compliant when measured at the proposed dwellings.*
- 60 *The first is the three compressors and coolers (known as units P1, P2 & P3) and plant room on the supermarket roof, the closest of which (the P1 unit) is about 1 m from and slightly below the wall of apartment 20. There is also the compressor and cooler on the roof above the convenience shops (unit P4). All these units and the plant room may operate 24 hours a day.*
- 61 *The second is the noise from delivery trucks (with sizes ranging from vans to semi-trailers, waste compaction and waste collection in the loading bays below apartments 20 to 23.*

When reviewing VCAT's consideration above and referring to the diagram of noise sources on the following page, which is an extract from the SLR Consulting Australia Pty Ltd 'SEPP N\_1 Assessment of Noise to the Proposed Development and Recommendations for Noise Control' Report it is clear that all the significant noise sources are located on the opposite side of the shopping centre and therefore will not pose an amenity concern for residents of Stage 2. For windows and walls that are adjacent to the truck loading area we advise Council that they will be treated in the manner recommended by SLR Consulting Australia Pty Ltd in the 'SEPP N\_1 Assessment of Noise to the Proposed Development and Recommendations for Noise Control' Report. Furthermore all light wells will be treated in the manner required during Stage 1.

We submit that the nature and location of Stage 2 ensures that the acoustic concerns related to Stage 1 are not relevant for Stage 2.





## 10. Conclusion

We acknowledge that Stage 2 proposes a sizeable increase to the number of apartments above the Aspendale Gardens Shopping Centre however we submit that the proposal remains entirely consistent with the objectives of State and Local Policy; whilst the design ensures that there will be no adverse effects related to bulk and that all future residents will be provided a high degree of amenity.

20 March 2016

City of Kingston  
Statutory Planning  
PO Box 1000  
Mentone, VIC, 3194

Dear Tara,

**PLANNING PERMIT APPLICATION – KP-558/2014**  
**11-33 NARELLE DRIVE, ASPENDALE GARDENS, 3195**  
**DEVELOPMENT OF 70 UNITS AND ASSOCIATED CARPARKING ABOVE EXISTING SHOPPING CENTRE**  
**(STAGE 2)**

I refer to the aforementioned planning application and Council's request for additional information dated 1 February 2016.

In response to Council's request for additional plan detail, please find attached amended plans which provide all additional traffic related information. The additional traffic information was added to the plans in consultation with Ratio traffic consultants who reviewed Council's RFI and informed Finnis Architects.

The attached plans are known as Revision D and supersede the following plans:

- TP4.0
- TP4.1
- TP6.0
- TP7.0

In response to the other information requested by Council we provide the following:

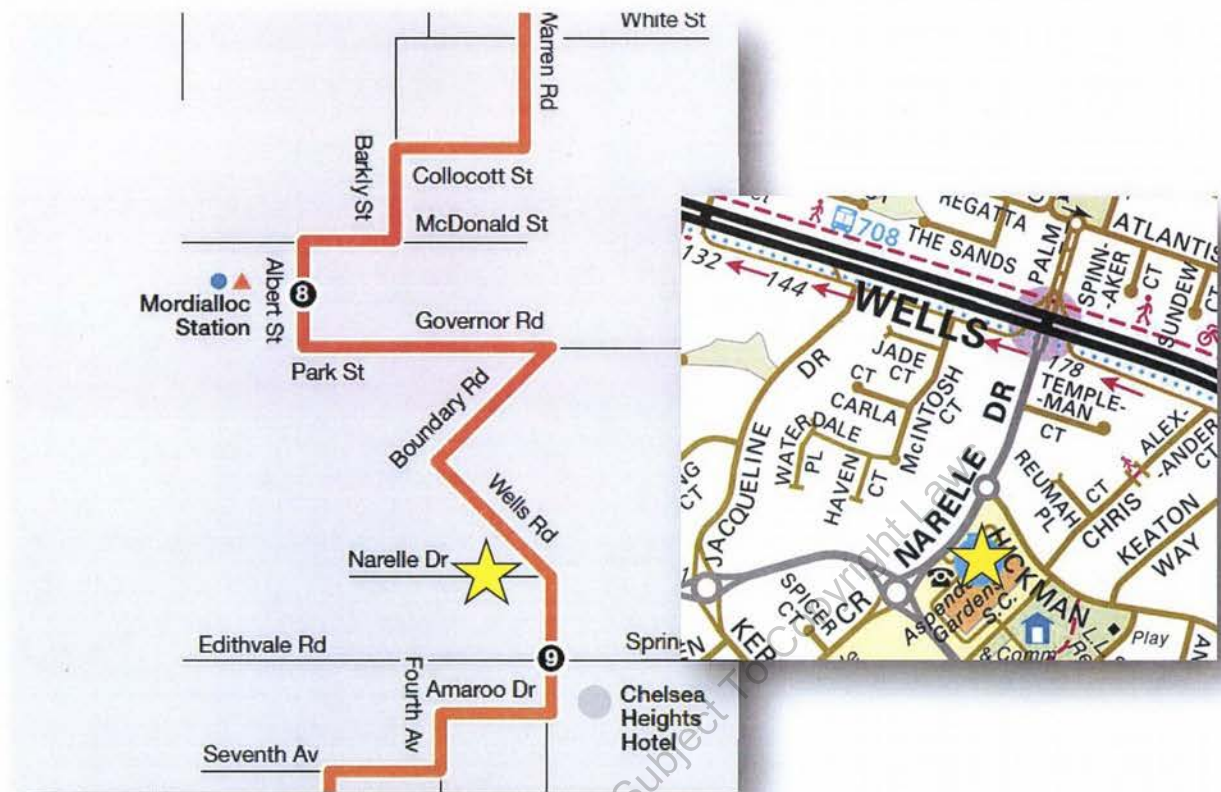
**Justification for increased intensity of development**

Council has requested additional justification for the increased density of development in an area that Council says does not have good access to public transport.

We acknowledge that the subject site is not near a train station, however this does not mean it is not adequately serviced by public transport.

Below we attach an extract from the 708 bus route showing that the bus service that runs along Wells Road, with the nearest bus stop within 260m of the subject site. Buses run every 30 mins during the week and can deliver people to Mordialloc train station within 20 minutes, therefore the site does not have a poor public transport situation.





We submit that an opportunity to increase the intensity of living with the Neighbourhood Activity Centre should be encouraged. This position is supported by the expert opinion of Hansen Partnership who provided comment on the appropriateness of the proposed development from a strategic perspective. We include some extracts of the Hansen Urban Context Report below:

*The site is in a key area of urban consolidation, located within a Neighbourhood Activity Centre and associated amenities. High quality, site responsive design is strongly encouraged within these areas to take full advantage of access and services.*

*Consistent with Clause 16 the site is considered to be a Strategic Redevelopment site, being located within a NAC and able to provide 10 or more dwelling units.*

*The retail/ commercial development strategy was developed to guide the future development of retail, commercial and office investment in Kingston. It identifies Aspendale Gardens as a Neighbourhood Activity Centre. This has informed local policy Clause 21.06 Retail and Commercial Land Use. The strategic direction for Neighbourhood Centres includes 'promoting a wider mix of commercial, retail, residential and community facilities to enhance their attractiveness as local community centres'.*

*Aspendale Gardens is identified on the Strategic Land Use Plan as an area for the promotion of incremental housing change, with the Residential Land Use Policy objective to 'provide a range of housing types across the municipality to increase housing diversity and cater for the changing housing needs of the current and future populations'.*

*One strategy identified to achieve this is through residential development within activity centres via shop-top housing noting the intensity and scale of development will need to be in keeping with the scale of the centre. Residential land surrounding the subject site is included in the General Residential Zone –Schedule 3 (GRZ3), which imposes a maximum building height of 9m, suggesting that housing diversity will be achieved on commercial land.*

As identified by Hansen Partnership above there is a suite of State and Local Policy that encourages this type of development. To assist Council we refer to some of the Policy that supports an increased density of development within the Activity Centre.

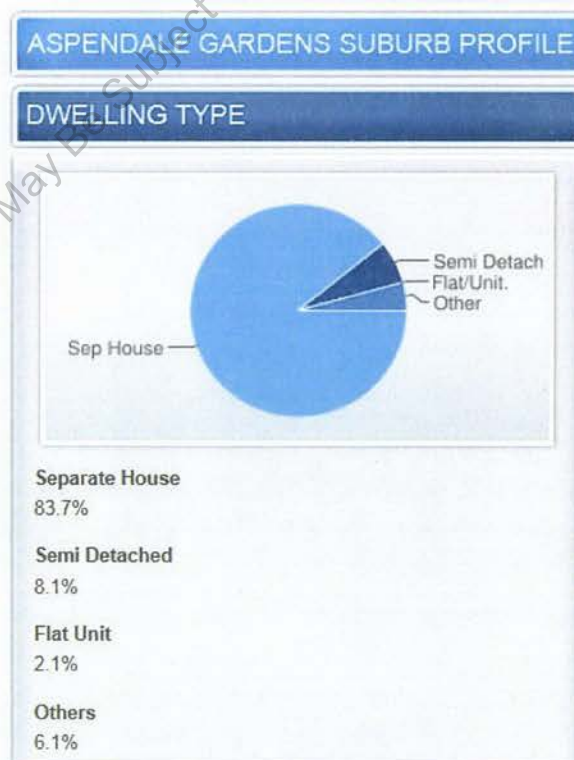
Clause 16 – Housing - states that:

*"new housing should have access to services and be planned for long term sustainability, including walkability to activity centres, public transport, schools and open space".*

We say that there is no better location for an increased density of living with Aspendale Gardens because the subject site has the unique benefit of being directly within the Activity Centre, is within walking distance of a bus route, is directly adjacent to a school, community centre and open space area. In short the site is ideal to accommodate additional housing. Further to the above Clause 16.01-4 Housing diversity seeks to "ensure housing stock matches changing demand by widening housing choice".

The reality is that Aspendale Gardens

currently provides an almost homogenous housing stock. The figures opposite show that over 80% of the existing housing stock is provided by detached houses. It also shows that only 2.1% of housing is flats/units. ([propertydata.com.au](http://propertydata.com.au))





There is no other strategic site that could accommodate a significant increase in density within Aspendale Gardens due to the majority of the residential land being GRZ3, which has a mandatory 9m height requirement.

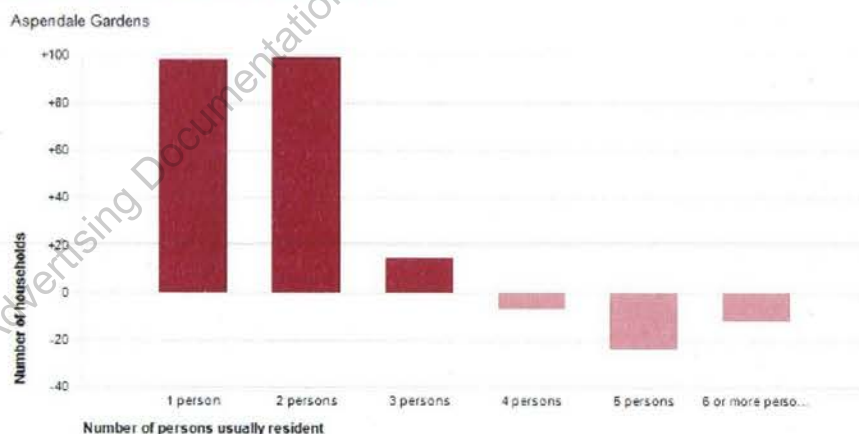
There is further evidence that Aspendale Gardens needs housing diversity. The table below (using Australian Bureau of Statistics Census data) demonstrates that in 2011 almost 40% of households in Aspendale Gardens were one or two person households. This was an increase from 33.10% in 2006.

### Household size

Aspendale Gardens		2011			2006			Change
Number of persons usually resident		Number	%	City of Kingston %	Number	%	City of Kingston %	2006 to 2011
1 person		282	13.6	26.0	184	9.7	26.9	+98
2 persons		544	26.3	31.9	445	23.4	32.2	+99
3 persons		362	17.5	16.4	348	18.3	16.0	+14
4 persons		604	29.2	17.3	611	32.1	16.6	-7
5 persons		216	10.4	6.3	240	12.6	6.2	-24
6 or more persons		64	3.1	2.1	76	4.0	2.1	-12
Total classifiable households		2,072	100.0	100.0	1,904	100.0	100.0	+168

Source: Australian Bureau of Statistics, [Census of Population and Housing](#) 2006 and 2011. Compiled and presented by [.id](#), the population experts.

### Change in household size, 2006 to 2011



Source: Australian Bureau of Statistics, [Census of Population and Housing](#), 2006 and 2011 (Enumerated data). Compiled and presented in profile [.id](#) by [.id](#), the population experts.

The trend toward decreasing households has not been supported by increased housing diversity. This application provides opportunity for improved housing diversity to follow the demographic trends.



We reiterate our position that the development of increased density within the NAC is supported by State and Local Policy and is not so poorly serviced by public transport that it weakens encouragement for the density of housing proposed. Furthermore an expert urban design assessment has been conducted clearly supporting the size, scale and design detail of the proposal, therefore from a strategic and urban design perspective the proposal is worthy of support.

#### **Air-conditioning units**

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We advise Council that there will be no central air-conditioning units; instead an individual air-conditioning unit will be placed on the balcony area of each apartment in the same manner as Stage 1.

#### **Updated perspectives**

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We do not intend on submitting updated perspectives at this stage of the process. There are currently two versions of perspective drawings – one set produced by Finnis Architects and the other by Virteer Pty Ltd. The primary purpose of the perspectives is to give a 3 dimensional, artistic impression the proposal to demonstrate its context with the existing shopping centre, the stage 1 development and surrounding area. We are entirely comfortable that the perspectives achieve their primary goal and feel that constant amendment of the perspectives every time an amendment is made to the proposal is onerous and unnecessary.

#### **Sustainable Management Plan**

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We have made arrangements with Gavin Ashley at MEFL to attend a workshop. We will attend with Finnis Architects and the sustainability consultants engaged to advise on the project, Sustainable Development Consultants Pty Ltd.

#### **Urban Context Report**

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Hansen Partnership have provided an Urban Context Report. The expert report concludes that:

*In conclusion, we consider the proposal to represent a considered and well resolved urban design outcome that fits well in the future context of Aspendale Gardens NAC. This is a proposal which, in our opinion, warrants approval.*

#### **Daylight assessment**

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A response to this will be informed by the outcome of the MEFL workshop and associated sustainability assessment.

Further to the above we contest Council's overall position regarding the location of the proposed development, the extent of built form, lack of integration with Stage 1 and internal amenity. All of these matters have been responded to within the expert report prepared by Hansen Partnership and the conclusion was overwhelmingly supportive of the proposal in all aspects. On this basis we submit that the most appropriate step is to 'test' the application via the advertising and referral process as we have provided all information necessary for Council to progress the application.

Trusting the attached is deemed satisfactory, we look forward to confirmation that the application will progress to advertising without delay. In the event that Council determines this response is incomplete, we respectfully request an extension of time in order to ensure sufficient time to re-submit information.

Kind regards,



Luke Dowdle  
Town Planning Consultant

21 December 2015

City of Kingston  
Statutory Planning  
PO Box 1000  
Mentone, VIC, 3194

ADVERTISED

Dear Tara,

**PLANNING PERMIT APPLICATION – KP-558/2014**

**11-33 NARELLE DRIVE, ASPENDALE GARDENS, 3195**

**DEVELOPMENT OF 70 UNITS AND ASSOCIATED CARPARKING ABOVE EXISTING SHOPPING CENTRE  
(STAGE 2)**

I refer to the aforementioned planning application and Council's request pursuant to Section 54 of the *Planning and Environment Act 1987* dated 10 July 2015.

In response to Council's request for additional information we provide additional information to each point of Council's aforementioned letter.

We also advise that, in response to some of Council's recommendations, we have amended the plans. The amendments could generally be described as follows:

Ground floor

- The addition of an enclosure over the loading bay (in response to expert acoustic recommendations).

Level 1

- Deletion of 1 m gap between carpark 37 and 46-51 and visitor space 4 and car parks 42-45 and commensurate widening of the southern carpark lane.
- Addition of 10 lockers adjacent to loading bay.
- Deletion of three storage lockers within southern stair lobby.
- Deletion of door to hallway adjacent to car spaces 31-32 and replacement with storage locker Addition of three storage lockers facing stage 1 carpark.
- Addition of 2 bike storage areas facing stage one car park

Level 2

- Additional full height acoustic glazing to the eastern side of the balcony to apartment 39
- Amending apartments 27-29 from type 2 to type 1.

Level 3

- Amending apartments 56-58 from type 8 to type 7.



- Additional full height acoustic glazing to the eastern side of the balcony to apartment 58

## Response to Council request for addition information

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### 1. New Application form

A new application form has been provided, with acknowledgement of the permit trigger to vary the car parking requirement of Clause 52.06. The land description has also been updated to include common property as part of the Planning Application.

With respect to the declaration we advise that the owner's corporation has been notified of the proposal, accordingly we have completed the declaration section of the application form. This is a legal declaration so there is no need, or purpose, in providing additional information to support the declaration.

### 2. A revised Planning Report

#### a) Changes to the existing approved ground floor plan

The previous Planning Submission dated February 2015 included a list of changes made from the previously approved first floor plans, as per below:

- New door to north-eastern wall of first floor carpark to allow access to the proposed storage lockers to be constructed (between car spaces 21 and 22)
- New stairs to first floor lobby adjacent to lift, near northern entrance to shopping centre,
- New door adjacent to carpark 29 at first floor level to access lift, stair well, storage and rubbish bin storage area proposed on the central, south-east wall.
- Deletion of south-west facing windows from first floor lobby (adjacent to northern lift area).

In addition to the above we also identify the following changes to the endorsed plans at ground floor level:

- a bike storage room adjacent to car space 15
- a bike storage area adjacent to car space 1
- 9 storage lockers adjacent to the south-west of car spaces 1 and 15.
- two storage cupboards adjacent to car space 29
- reconfiguration of the top of the vehicle ramp. The straight portion of the ramp now extends further east than previously approved and turns into the first floor carpark at 90 degrees, rather than the previously approved s-bend type alignment.
- A new entry lobby, lift and stairwell adjacent to the substation on the southern side of the shopping centre.
- Two new columns to the southern side of the vehicle ramp, near the ramp landing area.

***b) Overall dwelling mix within the development***

The originally endorsed plans approved 23 apartments that contained the following dwelling (apartment) types:

- 1 x studio (1 bedroom)
- 7 x 1 bedroom
- 13 x 2 bedroom
- 2 x 3 bedroom

This variation of apartment types was obviously supported by the Tribunal and provided a positive mix of dwellings types, whereby four different apartment types were proposed in the context of number of bedrooms (or studio style), but also provided a range of different sized apartments, ranging from 35m<sup>2</sup> internally to 89.20m<sup>2</sup>.

This amended plans retain the existing apartments as-approved but also adds the following dwelling mix to the proposal (all apartments referenced below are newly proposed and none reflect the design of the originally approved apartments, therefore adding to the dwelling mix within the overall development):

- Eight different types of apartments with sizes ranging from 49m<sup>2</sup> to 91m<sup>2</sup> internally.
- Balcony areas to each apartment range from 8m<sup>2</sup> to 42m<sup>2</sup>.
- 28 x 1 bedroom
- 28 x 2 bedroom with ensuite
- 6 x 3 bedroom

To further assist Council a detailed schedule of all apartment types has been provided at TP3.1 of the submitted plans.

## EXTRACT OF APARTMENT SCHEDULE



Not only does the above response describe that there are 13 different types of apartments within the overall development, but the apartments also wrap around three different sides of the building, therefore providing different outlooks and different internal views to the common courtyard areas. We submit that this dwelling mix is entirely appropriate and generally goes beyond the dwelling mix provided in an apartment development of 85 dwellings.

Further to the above the project has been specifically designed to provide a dwelling diversity for the Aspendale Gardens area, whereby there are very few apartment-style dwellings. The range of 1 to 3 bedroom apartments caters for a wide range of people looking to live in the area in a dwelling that differs from the existing housing stock *i.e.* detached family-sized dwellings on land in excess of 500m<sup>2</sup>. VCAT discussed this matter below in the decision for the original application:

*This is evident from the same policy as that quoted above, which seeks to encourage shop-top housing in activity centres. Such housing will be affordable, and a more diverse offering for different household types when compared to the surrounding predominantly detached housing. It will also allow the opportunity for existing elderly members of the community to move into a more appropriate form of housing within their own community, that requires a much lower level of maintenance.*



c) Works to P4

No formal decision has been made regarding the proposed relocation of P4, however we are conscious the unit will have to be relocated, or a new unit installed to replace the existing unit. This matter can comfortably be addressed as a condition of permit whereby Council can require the location and type of unit to be shown on the plans.

**3. Urban Context Report**

Hansen Partnership, specifically Craig Czarny, has been engaged to prepare an amended Urban Context Report. This report wasn't able to be finalised due to the Christmas break, however we will provide Council a copy of the report as soon as it's available in the new year.

**4. Acoustic Report**

A comprehensive acoustic report by SLR Consulting Australia Pty Ltd (dated 21 December 2015) has been submitted as part of this response.

**5. Structural detailing**

We advise Council that structural detailing of the proposal has not been completed. In fact it is very rare for any structural detailing to be completed at this stage of the process. VCAT reviewed this precise matter in their consideration of the original proposal and ruled that it was onerous and unnecessary to expect an applicant provide structural detailing during the Planning phase of a project:

- 54 *A permit applicant is not normally required to demonstrate how a proposed building can be structurally supported if built generally in accordance with the plans in the permit application. This is because the purpose of the Planning and Environment Act 1987 (and, consequently, the Kingston Planning Scheme) under which the decision on BC39's application must be made does not expressly include structural integrity of a building. The purposes of the Building Act 1993 include 'administering building and safety matters'<sup>1</sup> and the requirements under the Building Code of Australia extend to structural integrity of a building.*
- 55 *As a matter of policy, any implied requirement to demonstrate structural support for a building in a permit application under planning law would incur unnecessary costs, particularly if a permit is refused on planning grounds.*
- 56 *We acknowledge that the broad nature of planning considerations may in special circumstances impliedly require additional detail regarding a proposed building that might normally not be required. As an example, the construction of a building in special areas for planning purposes, such as heritage, bushfire or erosion-risk areas,*

*may warrant policy and particular provisions directed towards the need for a permit applicant to satisfy a planning decision-maker of specified detailed building matters.*

- 57 *Wark does not support the admission of structural engineering evidence in this proceeding. In that case, the subject land was in a heritage overlay and the Tribunal admitted evidence of potential risk to structural integrity of a building built to the boundary on adjoining land resulting from excavation of the subject land to that boundary. The Tribunal relied on a heritage overlay decision-guideline relating to the character and appearance of adjoining buildings. Those special area circumstances do not apply in this proceeding.*

## **6. Updated WMP**

An updated WMP has been provided by Leigh Design Pty Ltd.

## **7. Updated Traffic Report**

Brett Young, Director, at Ratio Traffic Consultants has provided a response (dated 22 December 2015) to the specific traffic related matters raised within Council's RFI.

## **8. Sustainable Management Plan**

Finnis Architects have been working with Sustainable Development Consultants Pty Ltd. of Camberwell in the preparation of the amended plans, however we ask Council to provide feedback on the amended plans and additional information prior to our preparation of the SMP. I'm sure Council can appreciate that if any changes to the plans were required it would then necessitate changes to the SMP. We advise Council that we commit to submitting an SMP as soon as Council provides a response to indicate that they are generally satisfied with the layout and scale of the apartments.

## **9. Amended site layout plans**

- a) waste bins will be collected through roller doors which leads out to ramp landing area. This provides direct access to waste truck.
- b) setbacks have been provided on all floor plans
- c) all circulation corridors and storage cages have been dimensioned.
- d) dimension of apartments above loading bay to mechanical equipment shown
- e) We refer Council to the notations on plan showing where stackers are and how many are in each stacker. The design has been modified whereby there are now two large stackers in lieu of 1 large and three small. This arrangement provides more room to work with and will be a more cost effective with regards to installation.
- f) title boundaries and lot numbers have been added to all plans.
- g) for heating and cooling units – refer to apartment styles on sheet TP 3.1 & 3.2. All apartments will be provided with internal condensing dryer. We expect that this can be a condition of planning permit.

- h) lower end of ramp grade added to plans
- i) all carparking spaces dimensioned
- j) new building forms on ground floor are now dimensioned
- k) existing loading bay drawn and to remain as is
- l) location of mechanical plants have been dimensioned on plan. For details – refer to acoustic report
- m) The annotation is 02, not D2 and refers to a skylight in courtyard above. Refer Plan Key
- n) Acoustic treatments nominated on plan
- o) Corridor width dimensioned on all plans with desired widths allowed for.
- p) All floor levels at various elevations have been noted on all plans.
- q) All windows are now showing properly in plan.
- r) Rooms and balcony dimensions have been shown on sheets TP 3.1 & 3.2

#### 10. Amended site layout plans

- a) Additional internal elevations have been provided as requested – refer sheet TP6.2 as well as previously submitted sections which show some of these elevations.
- b) Floor to ceiling levels shown on all elevations and sections
- c) Title boundaries and title lots shown on all elevations.
- d) lift overruns can be accounted for below proposed roof lines. Maximum ridge line dimensioned in elevations.
- e) Maximum building height dimensioned on elevations.
- f) All elevations and sections show operable windows and obscured glazing
- g) Refer to section BB callouts 1 & 2 on sheet TP6.1

#### 11. Section diagrams

##### 12.

- a) Floor to ceiling levels dimensioned for where waste truck will operate shown on section FF sheet TP6.1 & section GG sheet TP6.2
- b) Title boundaries and lots shown on all sections

#### 13. Concept landscape plan

Schematic landscape legend shown on relevant floor plans indicating intended mature height of proposed plants .

#### 14. Elevations updated to show adjoining community centre

Architectural renderings have been provided on sheet TP3.0. These include:

- Loading bay enclosure
- Better representation on community centre
- Better representation on existing plantings
- More realistic representation on existing signage
- Ventilation louvres from car park level have been lightened to better match existing wall colour.



## 15. Perspective drawings

Perspective Drawings by *Virteer Pty Ltd* have been provided generally showing images from the following perspectives.



Due to time constraints the perspective drawings don't contain all of the design detail shown on the architectural plans, however Finnis Architects have also prepared their own perspectives to assist Council.



## **16. Overshadowing diagrams**

Overshadowing diagrams have been provided at TP8.0 of the submitted plans by Finnis Architects

## **17. Electronic copy**

All information referred to above is included on the attached USB.

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In addition to the above we respond to the other matters that Council raised within the letter:

### **Development in common property**

We are conscious that there are various elements of the proposal that extend into common property. As advised earlier in this response we declare that the owners of common property have been advised of the proposal. We also draw Council's attention to the fact that submissions were made to the Tribunal around the matter of futility for the originally approved permit, yet that stage of the development is now under construction so do not agree that consent to construct on common property is required at this stage.

### **Built form**

The built form matters raised by Council generally relate to issues of Urban Design therefore we will rely on the update Urban Context Report from Hansen Partnership to respond to these matters, however we respond to some of the points raised below:

- The architects have chosen to ground the south east side of ramp by providing blade walls in lieu of earlier designed stilts. We submit that this limits the previously designed voids and achieves Council's preferred outcome of a grounded ramp when viewed from the south east.
- Detailing of carpark ventilation louvres have been lightened in elevation so that they are the same colour as wall that are placed in. This will help them disappear compared to previous black louvres.





- The vertical battens along south east elevation facing LL Stevenson reserve have been raised so the they extend to upper level eave. This will better tie the design of this elevation to remainder of the development.

#### Impact on existing commercial areas

We are entirely comfortable that the built form over the loading area will not impact on existing commercial operations, nor is it excessive in scale or bulk. As discussed earlier in this response the loading bay has now been enclosed in response to the recommendations of SLR Consulting (acoustics). The enclosed loading bay has been reviewed by Ratio Traffic Consultants and it was concluded that vehicle movements will not be impeded as a result of the enclosure. There will also be no pressure to change the existing commercial operations to ensure future acoustic compliance because all apartments on this elevation have now been designed to ensure full acoustic compliance.

#### Traffic and carparking

Council raised concerns about the ramp design and lack of ability for two way access to stage 2. This matter has been responded to by ratio Traffic Consultants:

*The access ramp connecting the Stage 1 and Stage 2 car park has been widened through the relocation of the steps that were previously running alongside it. This results in sufficient width now being provided to cater for simultaneous movements should they occur. A convex mirror and hold line is still suggested to be provided to facilitate the passing of vehicles at this point.*

Other traffic and carparking matters have been specifically addressed in the Ratio response, item-by-item.



### **Internal amenity**

Numerous changes have been made to the apartments, with the changes to achieve an improved internal amenity outcome. Again, Hansen Partnership will respond to these matters but in the interim we advise:

We do not agree with Council's recommendation to 'flip' the southern apartments so that they have internal northern courtyards. This outcome would result in the need to screen SPOS areas to prevent overlooking in to each other private open space. We submit that a preferred outcome is for balconies and open space make full use of the view out to reserve to the south. Furthermore the entrance doors to these apartments have been made 2400mm in height and are glazed as suggested by Council.

With regards to the 14 dwellings that have borrowed light on level 1. We have sought to improve access to direct daylight through the implementation of skylight shafts that extend up to roof. We submit that this is a very positive outcome that will not only add light to level 1 bedrooms but also to level 2 bedrooms and bathrooms giving these apartments a point of difference.

We acknowledge Council's recommendation that all balconies be 2m wide compliance requires balconies to be 1.80m wide which is achieved, with the exception of some balconies which vary the standard by an inconsequential 25mm.

### **Circulation Spaces**

Council contended that circulation spaces on level 1 and level 2 have no opportunity for natural light or ventilation. We say that this comment is incorrect as this passage is connected to stairs at either end of corridor that lead up to a passage way on level 2 which is open to natural light and ventilation. This will allow natural light and ventilation to spill down stairs into level 1 corridor. For added benefit we have added a window at end of corridor facing the reserve.

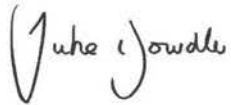
### **Services:**

We have removed second letter box location and have proposed that all letter boxes are located in position as nominated in stage 1.

Furthermore the lobby at car park level has had storage cages removed to allow for a proper circulation space. Over bonnet storage has been removed as requested.

Trusting the attached is deemed satisfactory, we look forward to confirmation that the application will progress to advertising without delay.

Kind regards,

A handwritten signature in black ink, reading "Luke Dowdle". The signature is written in a cursive style with a large initial 'L'.

Luke Dowdle  
Town Planning Consultant

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## 11-33 narelle drive, aspendale gardens

urban context report

prepared by hansen partnership Pty Ltd  
on behalf of BC39 Pty Ltd

february 2016





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figure 1 context map



# 1 introduction

The following Urban Design Context and Design Response Report has been prepared by Hansen Partnership to accompany a submission for a planning permit for the proposed residential developments at 11-33 Narelle Drive, Aspendale Gardens. Details of the proposed development are outlined in the architectural and design response prepared by Finnis Architects dated November 2015. This report is based on an independent assessment of the proposal, as detailed on the above mentioned architectural drawings.

The document is structured to provide a brief description of the subject site, and the proposed design. It then sets out the relevant urban design policies, guidelines and controls that influence future development on the land. Finally the report presents an analysis of the relevant built form and urban design matters, and demonstrates how the proposed development responds to key features of its existing and anticipated future urban context. This process demonstrates that the proposed development is complimentary to its setting and consistent with the development form and image anticipated by the Kingston Planning Scheme.

We consider the proposal to represent an opportunity to realise a well-conceived residential development which allows for dwelling diversity and urban consolidation principles within the Aspendale Gardens Neighbourhood Activity Centre (NAC). The proposal is in keeping with key State and Local Planning Policies, and seeks to achieve urban consolidation responsive to its local urban context.

## Background

In 2013, VCAT determined that permit be granted for a residential shop-top development comprising 23 apartments above the existing supermarket tenancy. This approved residential is referred to as Stage 1. Stage 1 is aligned to the north eastern portion of the Centre and includes 2 storeys of outward facing apartments overlooking the Narelle Drive car park in addition to an elevated car parking deck with upper level units opening to a courtyard space. The entrance for the approved development is via an entry foyer lift and stair to the north elevation fronting Narelle Drive.

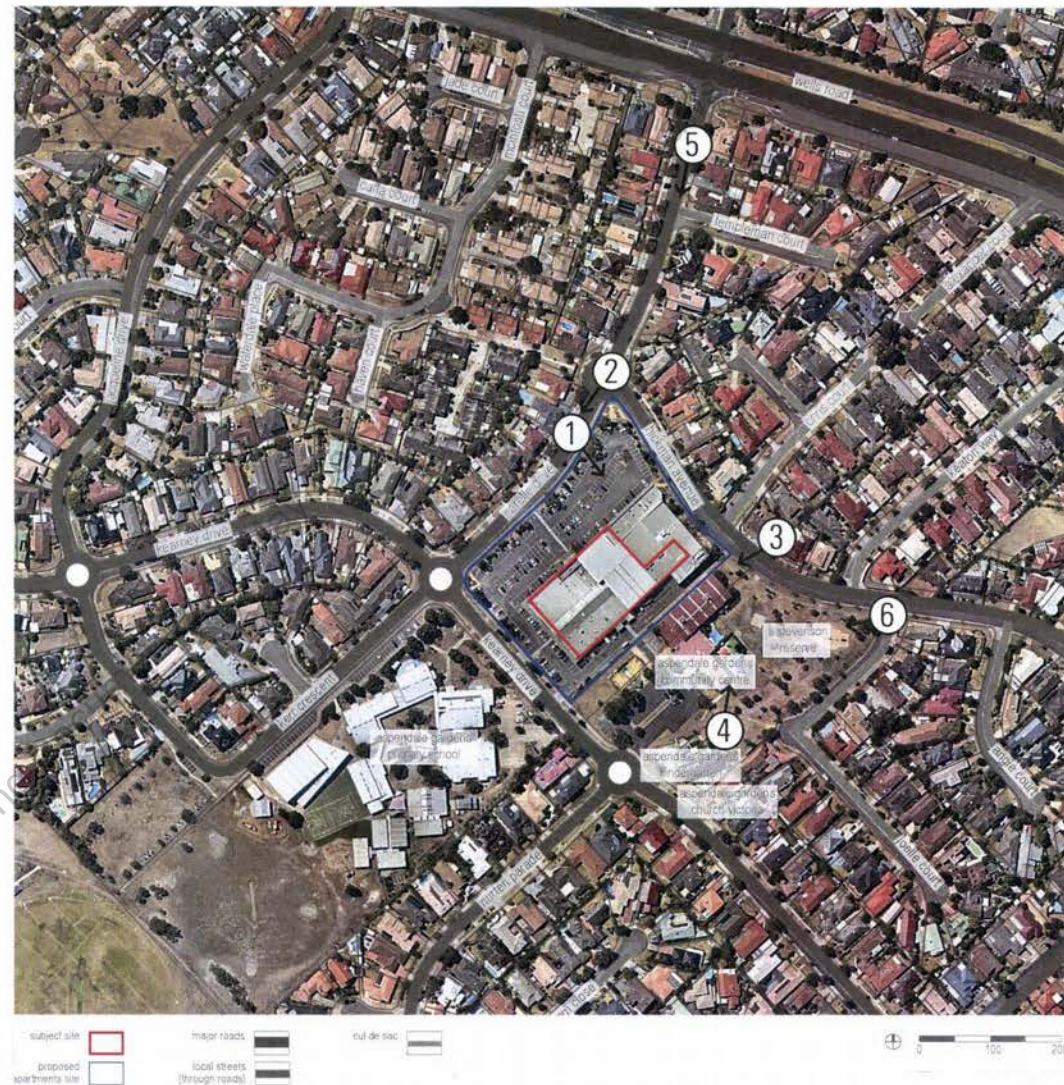


figure 1 site and surrounds



## 2 the site

The site is located within the 'core' of the Aspendale Gardens NAC at 11-33 Narelle Drive. The local convenience centre is located within the interior of the Aspendale Gardens residential neighbourhood between Wells Road (to the north) and the Yammerbrook Gardens Reserve (to the south). The Shopping Centre is clustered together with a Community Centre, Primary School and LL Stevenson Reserve forming a central node for the surrounding suburb. Bound by local streets on 3 sides with a service lane to the rear, the existing Shopping Centre is setback from the street edge by a periphery of at grade car parking primarily fronting towards Narelle Drive and Kearney Drive. The Shopping Centre currently comprises a 1 to 2 storey form with a small 2 storey element located central to the existing building footprint. The Shopping Centre primarily orientates toward Narelle Drive with a frontage width of approximately 145m and depth of approximately 105m, and resulting in a total area of 15,225 m<sup>2</sup>. The site is also effectively flat.

The Shopping Centre currently accommodates a range of small business and retail outlets facing outward to the immediate neighbourhood forming a primary frontage as well as small internal mall focused around a supermarket and food retailing businesses. Loading and service provision is accessed from the rear along an access road separating the Shopping Centre from the community and sports facilities to the south-east. The design language of the Centre is contemporary with rendered façades and large areas of glazing to shop fronts. A canopy protrudes over the footpath providing weather protection along the Centre's main frontages for pedestrians. The Shopping Centre 'turns' its back on the street along Hickman Avenue (to the east) with an unarticulated and inactive wall.

The site has the following frontages:

- **To the north**, is a surface car park of approximately 37m in depth facing Narelle Drive. A band of low landscape planting separates the car park from the street edge with canopy vegetation on the verge. Facing the Centre along Narelle Drive are 1 and 2 storey detached residential dwellings with open front gardens. Some dwellings have low permeable fencing and minimal side setbacks.

- **To the east**, the Centre is setback approximately 3m from the site boundary allowing for a band of vegetation to screen the building edge along Hickman Avenue. Dwellings facing the subject site are similar in the form, setbacks and character to those along Narelle Avenue.

- **To the west**, Kearney Drive separates the subject site from the Aspendale Gardens Primary School. The school buildings are 1 storey forms clustered around a central meeting and play space with sporting facilities located further to the west. The immediate frontage of the school comprises landscaped gardens and Staff car park with formal pedestrian entry oriented toward the north.

- **To the south**, is the 'rear' of the Centre with a service laneway running between Hickman Avenue and Kearney Drive which provides access to the loading bay. A secondary pedestrian entry links the Centre to the Community Centre and Kindergarten located within the LL Stevenson Reserve, across to service lane.

The surrounding residential neighbourhood of Aspendale Gardens is characterised by low scale detached dwellings on typical suburban allotments. Housing styles include mock period dwellings predominately early 1990s, and more recent styles with hipped and gabled roof form. The broad street network connects well with the wider arterial network with the local streets branching out in cul-de-sac arrangements.

In the broader context, the surroundings are defined by the proximity to the sand belt, with large areas of open space located within the 'green wedge' to the east and Port Phillip Bay to the west. Other proximate activity centres include the Mordialloc Major Activity Centre (MAC) to the north-west and Dandenong Central Activity District (CAD) to the north-east. The Braeside industrial employment precinct is located to the north. Local public transport provision is limited with bus services to the east along Wells Road (Route 708) connecting to Mordialloc train station.



Existing Shopping Centre from Narelle Drive



Looking south along Narelle Drive



Rear of Community Centre along Hickman Avenue



Front of Community Centre to the east



Looking south along Narelle Drive towards subject site



LL Stevenson Reserve to the east



### 3 the proposal

- The proposal is Stage 2 of the shop-top development above the Aspendale Gardens Shopping Centre. Stage 1 comprises 23 apartments and was approved in 2013.
- Stage 2 consists of an extension of the residential apartment model further to the south across the footprint of the specialty stores towards the Community Centre to the south and Primary School to the west.
- The development seeks to achieve a 3 storey form above the existing structure, occupying the air-space, and expanding upon the Stage 1 Approval. The total scale of the proposed development rises to 5 storeys and a total height of approximately 18.45m above natural ground level.
- The proposal comprises a further 62 dwellings and emulates the pattern of development realised in Stage 1 with an elevated car parking level concealed behind a 'sleeve' of apartments.
- Above the carpark are a further 2 levels of apartments oriented around private courtyards and communal terraces. The apartments are configured with an outward facing orientation so to enable passive surveillance and outlook across the public realm.
- Given the substantive dimension of the interior of the site, a further run of apartments across 2 levels are positioned centrally within the courtyard terrace.
- The outward presentation of the proposed development enables activation and frontage to each of its 3 sides, and internal activation of courtyard/circulation spaces.
- The configuration of the development has been arranged so that existing service and loading areas and access to Stage 1 car parking (and Stage 2 car parking) can be maintained via a ramp with a cantilevered and pylon supported structural regime.
- The development employs a regular and rhythmic elevational affects, comprising 2 levels of outward facing balconies, leading to more robust framed corner elements to each of buildings exposed corners.
- The uppermost level of the proposal is rebated with a flat 'floating' roof form.
- The scale of the development to the south is a 1.5 storeys (and 4.2m) higher than that of the approved Stage 1 development, primarily as a function of the elevated parapet of the retail form below.
- In terms of circulation, Stage 2 proposes 4 convenient core locations for residents, with main access from Narelle Drive. Pedestrian access from the car park to corridors provides convenient access to all apartments via 4 cores.



South-west view of main frontage from the corner Narelle Drive and Kearney Drive.

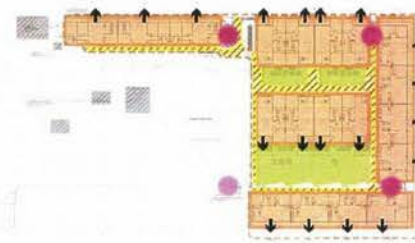
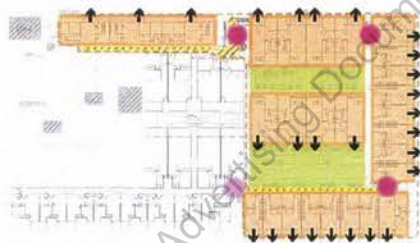
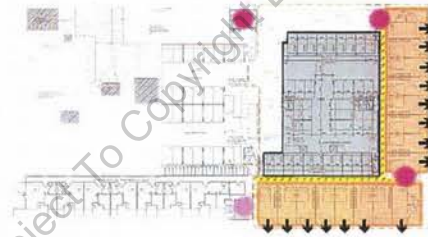
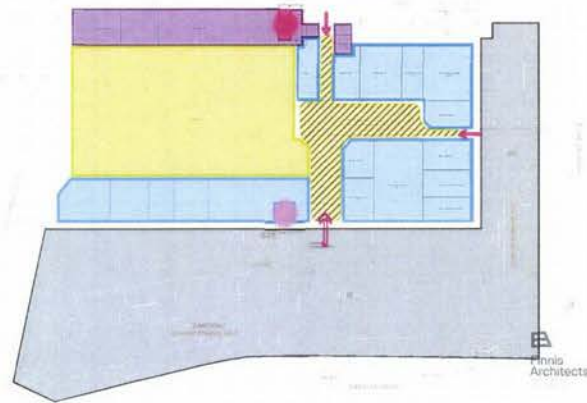


figure 3 site layout strategy



## 4 the planning context

### 4.1 State planning policy framework

- Clause 11.01 Activity Centres
- Clause 15.01-1 Urban Design
- Clause 16 Housing

The State Planning Policy Framework promotes consolidation around activity centres, encourages high standards of urban design, and new development that is respectful and considerate of existing and preferred neighbourhood character.

The site is in a key area of urban consolidation, located within a Neighbourhood Activity Centre and associated amenities. High quality, site responsive design is strongly encouraged within these areas to take full advantage of access and services.

Consistent with Clause 16 the site is considered to be a Strategic Redevelopment site, being located within a NAC and able to provide 10 or more dwelling units.

### 4.2 Local planning policy framework

- Clause 21.04 Vision
- Clause 21.04 Activity Centres
- Clause 21.05 Residential Land Use
- Clause 21.06 Retail and Commercial Land Use
- Clause 22.11 Residential Development Policy

### 4.3 Other relevant strategies

The following documents are also highlighted as relevant to the development of the site:

- Retail/ Commercial Development Strategy (Hansen and CKC 2006)
- Activity Centre Design Guidelines (DSE, 2005)
- Victorian Government, Urban Design Charter (2010).

The retail/ commercial development strategy was developed to guide the future development of retail, commercial and office investment in Kingston. It identifies Aspendale Gardens as a Neighbourhood Activity Centre. This has informed local policy Clause 21.06 Retail and Commercial Land Use. The strategic direction for Neighbourhood Centres includes 'promoting a wider mix of commercial, retail, residential and community facilities to enhance their attractiveness as local community centres'.

Aspendale Gardens is identified on the Strategic Land Use Plan as an area for the promotion of incremental housing change, with the Residential Land Use Policy objective to 'provide a range of housing types across the municipality to increase housing diversity and cater for the changing housing needs of the current and future populations'.

One strategy identified to achieve this is through residential development within activity centres via shop-top housing noting the intensity and scale of development will need to be in keeping with the scale of the centre. Residential land surrounding the subject site is included in the General Residential Zone – Schedule 3 (GRZ3), which imposes a maximum building height of 9m, suggesting that housing diversity will be achieved on commercial land.

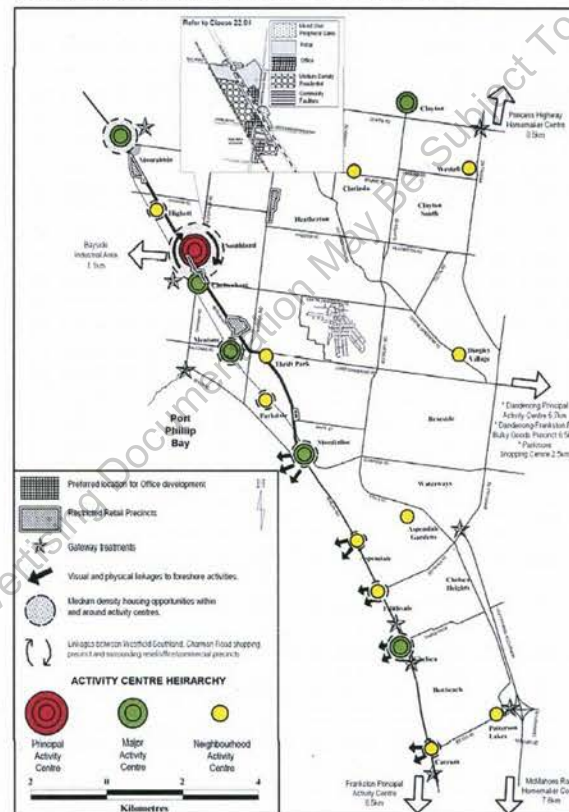


figure 4 Clause 21.06 Map of the locations and hierarchy of Activity Centres with the City of Kingston

### 4.4 Current planning provisions

#### Commercial 1 Zone (C1Z)

The key objectives of the C1Z are:

- To provide for residential uses at densities complementary to the role and scale of the commercial centre

While this report does not include a step – by – step assessment against the Activity Centre Design Guidelines, the Guidelines have been considered in our review of the proposal.

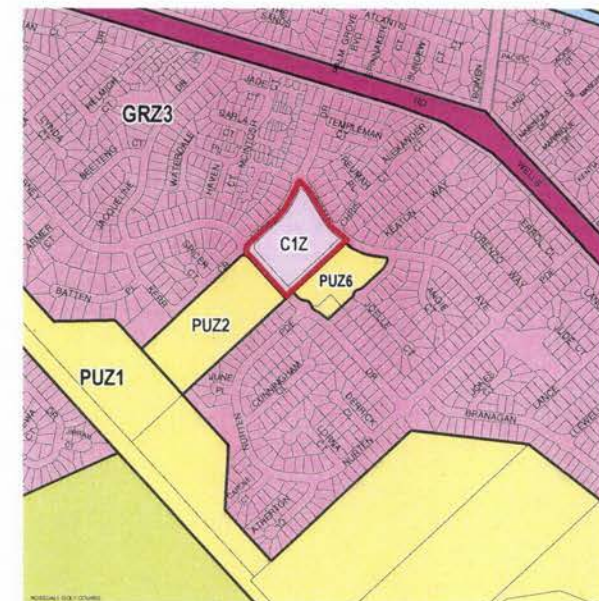


figure 5 zoning map



## 5 urban context assessment

In assessing the urban design merit of the proposed development, particular attention has been paid to the presentation of the proposed building in the public realm, its 'fit' within the existing and preferred neighbourhood character and context, and the relevant policies identified previously. The key design considerations include:

- urban structure & land use;
- access, movement and streetscape;
- landscape and environment;
- development typology and built form; and
- detailed design

### 5.1 urban structure and land use

Urban structure refers to the key skeletal features of the place, such as streets and urban blocks that define the layout and character of the precinct. These are important to the function and image of the place and must be recognised and reinforced in the new development. An appropriate design response is one which takes advantage of location and complements the surrounding development pattern and the expected evolution of the precinct.

#### context

- The proposed site is located above the existing Aspendale Gardens Shopping Centre.
- Wells Road forms the primary east-west connection to Chelsea Heights to the south and turns into Boundary Road to the north.
- The surrounding residential neighbourhood of Aspendale Gardens is characterised by low scale detached dwellings on typical suburban allotments. The broad street network connects well with wider arterial network with the local streets branching out in cul-de-sac arrangement.
- The local convenience centre is located within the interior of the Aspendale Gardens residential subdivision between Wells Road in the north and the Yammerbrook Gardens Reserve to the south.
- Currently the proposed site accommodates a range of small business and retail outlets facing outward along with a small internal mall focused around a supermarket and food retailing businesses.
- The Centre is clustered together with a Community Centre, Primary School and LL Stevenson Reserve forming a central focus for the suburb.

#### design response

- The critical urban design benefit in establishing a form of this magnitude and presence within the setting is the opportunity for active frontages to 3 of the 4 sides of the proposed development, resulting in excellent passive surveillance and 'eyes on the street' which will improve community safety and amenity.
- The proposed development seeks to establish accommodation and a 'captive market' of residents that live above existing retail facilities and nearby related commercial and community services. This represents an excellent model of integrated Activity Centre consolidation and provides added activity that enhances the economic prosperity of the place, and instils a more vibrant and active Neighbourhood Centre.
- Given the surrounding residential zoning and allotment sizes, limited opportunities exist to provide urban consolidation, therefore opportunities such as this should be maximised.
- The proposed 5-storey scale and massing is successfully absorbed into the local context given the substantial separation from surrounding low scale residential forms.
- The proportions of the proposal suitably compose and frame the presentation of a 3-storey form atop the elevated single storey base.
- The proposed massing generally steps down in form towards the more sensitive residential interface to the east.



figure 6 urban structure and land use plan

## 5.2 access, movement and streetscape

Street and movement networks service the wider urban structure for both pedestrian and vehicle movement. It is important that development establishes its own legible network that integrates with the surrounding area. A building's frontage to the street creates a transition between public and private space. Careful design of the street edge and the thoughtful location of building and car park entries contribute to the safety, comfort and character of a streetscape.

### context

- The site is surrounded by local streets on three sides (Narelle Drive to the north, Hickman Avenue to the east, and Kearney Drive to the west) and service lane at rear, to the south.
- The Centre orientates towards Narelle Drive to the north forming the primary access point for vehicular and pedestrian movement, with at grade car parking fronting the northern aspect. Access to Narelle Drive, and to a lesser extent Hickman Avenue, is from Wells Road.
- Being a primary east-west artery, Wells Road is also serviced by public transport with bus route 708 connecting to Mordialloc train station.
- The primary access point for vehicular and pedestrian traffic is off Narelle Drive, located central to the existing Shopping Centre 'box'.
- The secondary access point for vehicular and pedestrian traffic is from Kearney Drive to the west, primarily accessed by local residents. Kearney Drive separates the subject site, from the Aspendale Gardens Primary School, with formal entry orientated toward the north and connecting to site via a raised pedestrian school crossing.
- To the south is the 'rear' of the Centre with service laneway connecting Hickman Avenue and Kearney Drive and providing access to the loading bay. An additional pedestrian entry links the Centre to the Community Centre and kindergarten located within the LL Stevenson Reserve.

### design response

- The proposal is well conceived with respect to existing pedestrian and vehicular movements across the site and seeks to build upon and strengthen these established movement patterns.
- Being a site with essentially 4 frontages, the proposal has sought to clearly respond to each individual interface accordingly.
- The primary entry is consolidated with the approved pedestrian entry to Stage 1 which is located centrally to the Narelle Drive frontage.

- The configuration of the carpark has been centrally arranged so that the existing service, loading areas and vehicle access to Stage 1 car parking can be maintained and consolidated via a common ramp.
- The location of vehicle entrance ramp is a logical and positive response in urban design terms, being located to the rear, removing vehicle movements away from the primary facades and consolidating with the approved ramp, associated with Stage 1.
- Pedestrian access from the car park to corridors provides convenient access to all apartments via 3 cores.
- The outward presentation of the proposed development enables activation and address to each of the three sides, and a successful internal activation of courtyard spaces.
- The proposed enclosure of the existing loading area will enhance the amenity along this southern interface with the adjacent community centre, as it will reduce the impacts of noise and smells associated with 'back of house' service areas.

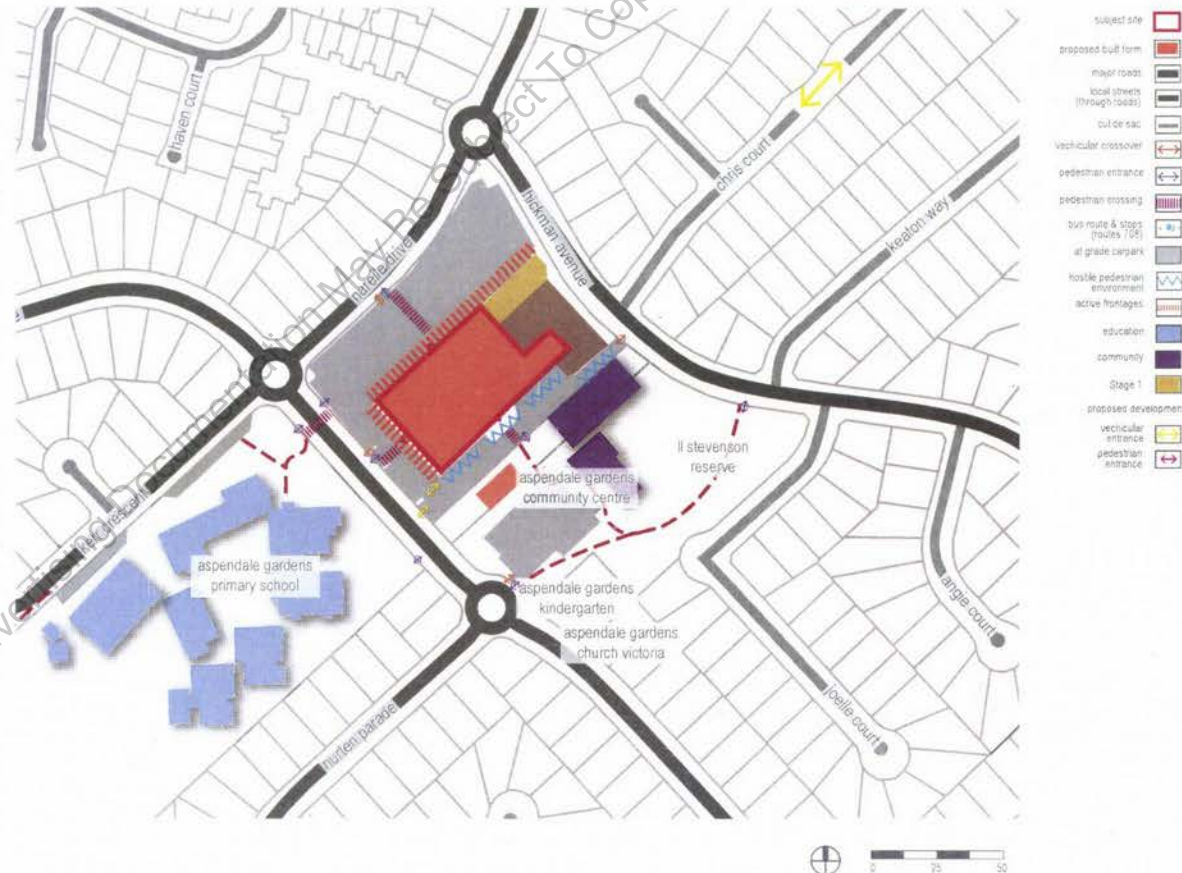


figure 2 access, movement and streetscape



### 5.3 landscape and environment

The analysis of environmental features in this precinct includes consideration of both natural and urban elements within the urban setting. The locality has been assessed in relation to topography, landscape, views to and from the site, microclimate and access to nearby open spaces. It is important for the building to the conditions identified and to provide a meaningful contribution the environmental features to benefit future occupants.

#### Context

- The site is effectively flat with minimal, if any, topographic variations across the Centre and broader neighbourhood.
- The current Centre offers a variety of amenities highlighting the importance of site responsive design taking advantage of the close proximity and access to services and facilities. The Centre currently offers retail and commercial amenities as well as nearby school and green spaces.
- A band of low landscape separates the car park from the street edge with canopy vegetation on the verge. To the east the Centre is setback approximately 3m from the site boundary allowing for a band of vegetation to soften and screen the building edge along Hickman Avenue.
- The immediate frontage of the school to the west comprises perimeter landscaped gardens, predominantly native planting. In the broader context, the surroundings are defined by proximity to the sand belt, with large areas of open space located within the green wedge immediately adjacent to the school and proposed site.
- Located a short distance to the south of the proposed Stage 2 is Yammerbrook Gardens Reserve, which comprises an expanse of green spaces and pathways along a broad linear open space corridor.

#### design response

- Given the air rights nature of the proposal and that it seeks to utilise the roof space of an existing structure, there is very little opportunity for public realm enhancement.
- The design is sympathetic to the surrounding context with development focused within the existing footprint. It provides a meaningful contribution to the surrounding context and activity centre, by providing an immediate population leading to increased activity and 'life' within the Centre.
- The proposed development adopts a landscaping strategy in reference to internalised court yard spaces of proposed dwellings and their communal terrace areas also serving as circulation corridors.



figure 8 landscape and environment plan



## 5.4 height and built form

The built form context is an important consideration in establishing an appropriate grain, rhythm and massing for new development. Built form focuses on the massing of the building, appropriateness of form and typology to establish an appropriate scale which fits with the character of the locality. The development must consider the surrounding sensitive residential frontage and character.

### context

- The existing shopping centre building is setback from each street frontage with a forecourt area of surface car parking along the primary frontage neighbourhood facing Narelle Drive and Kearney Drive.
- The surrounding residential catchment of Aspendale Gardens is characterised by low scale detached dwellings on typical suburban allotments.
- The Centre is currently a 1 to 2 storey form with a small 2 storey element central to the building footprint. However, the approved Stage 1 development proposes a 2 storey addition (to 3 storeys in height) comprising 23 apartments.
- The existing and approved built form within the site primarily orientates towards Narelle Drive.

### design response

- The proposed development represents a sound and logical extension to Stage 1, above the existing retail form. The proposal seeks to build upon rather than replicate the Stage 1 layout and architectural expression, and therefore adopts a more generous configuration.
- The scale and massing of the proposal is appropriate given the site's 'island' location. The proposed development is successfully absorbed in this location given the substantial setbacks around the threshold and the considerable distances between the proposal and any established conventional residential streetscapes.
- The proposed construction would build effectively on the existing footprint of the shopping centre. The proposal expands the first floor component and adds additional levels, realising a tempered 5 storey form.
- The proposed development has been carefully crafted as a medium rise element and does not present as a single uniform object. The built form is carefully massed with a strong rhythmic arrangement of outward facing apartments which articulate the broad facades.



figure 5.4 proposed building height and setback diagrams



- The proposed 17m elevation is positioned some 60m from the nearest residential streetscape and between 20-36m off the site's boundary, making it a suitable response which doesn't overwhelm the surrounding context.
- The proposed developments represents a 'firm' built edge, with a principal parapet at 4 storeys with a recessive upper level to the south west.
- The proportions of the proposed development have also been suitably handled in the presentation of a 3 storey form atop an elevated 1 storey parapet building.
- The proposal successfully overcomes the challenge of providing integrated vehicle access and parking with the existing structure and approved stage 1 development through utilisation of the existing vehicle access point and ramp, leading to a 'stepped' podium car park at Level 1. The provision of car parking is also appropriately 'sleeved' with apartments to the primary and secondary facades.
- The layout and configuration of the apartments at the top 2 levels utilises the provision of internal courtyard spaces with good orientation to provide access and amenity to the apartments at these levels. In addition to the apartment modules which 'wrap' the outer edge of the building, the internal framework is defined by 2 parallel courtyards of 12.9m and 7.2m in width and more than 30m in length. These courtyards represent a generous 'sacrifice' in the configuration of the upper levels.

- The internalised central run of apartments present a unique 'address' with their access provided from the internal courtyard and open air corridors. While this configuration is not conventional, we consider it to represent an acceptable response given the nature of the proposal and provision of ample space between apartments to enable maximum penetration of light to the Level 2 courtyards.
- The proposed enclosure of the existing loading area will enhance the amenity along the southern interface and represents a genuine enhancement to the public realm.

- Apartments are favourably orientated and a range of dwelling sizes and configurations has been adopted. Direct access to natural daylight is provided for all habitable rooms and in the instance of deep set apartment living spaces, rooflight windows along each axis to enable a high level of internal amenity in achieved. A similar treatment is employed to provide natural light to corridors and other communal spaces.

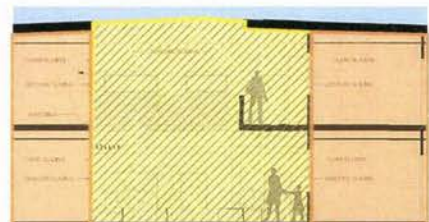
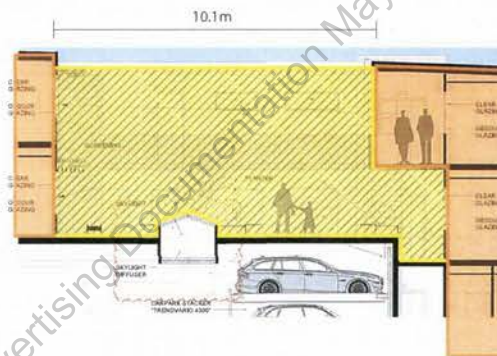
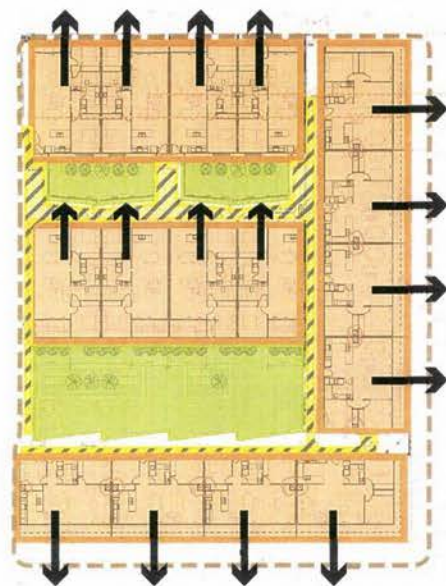
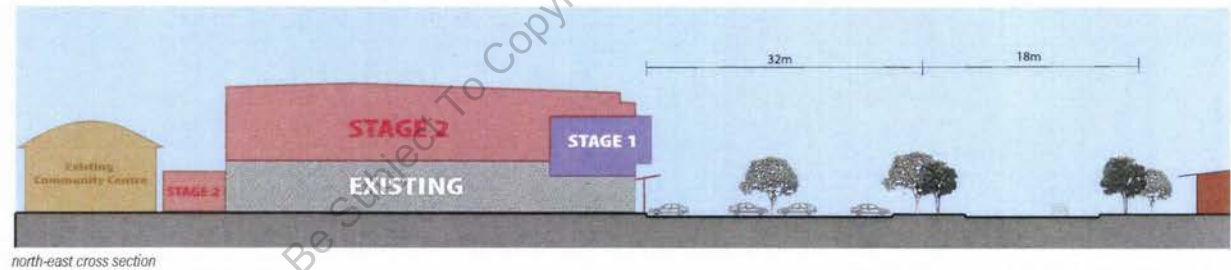


figure 10 massing and articulation diagrams



## 5.5 architectural expression and design detail

The architectural quality of the development has an important and tangible impact on the successful integration of the building into its surrounding context. A successful development should respect and reference key architectural qualities evident in the surrounding built form, including roof profiles, fencing treatments, materials and fenestration, to ensure the development is well embedded in the character of the area.

### context

- Surrounding housing styles include mock period dwellings and more recent styles with hipped and gabled roof form dominant. Fencing is low and open emphasising landscaped boundaries rather than constructed.
- The design language of the centre is contemporary with rendered facades and large areas of glazing to shop fronts. A canopy protrudes over the footpath providing weather protection along the Centre's main frontages.
- The approved Stage 1 development comprises a contemporary 2 storey extrusion at the existing Shopping Centre to its northern and eastern edges. This shop-top addition is successfully integrated into the existing retail base and comprises a well-articulated streetscape presentation.

### design response

- The design language proposed is highly contemporary, with a focus on a strong horizontal profile of the building with a well-considered arrangement of vertical interventions articulated through the use of glazing, timber screens and apartment balcony profiles. The composition of elevations realises a high quality integrated design.
- The proposal employs a contemporary suite of high quality materials and finishes including timber weatherboard cladding, vertical timber slats, frameless glazing and chrome supports, rendered walling and composite Alucabond cladding and eaves.
- The capping of the proposed building, when viewed from the north and west towards the recessed 4 storey with a strong horizontal eave which, ensures the proposal 'reads' as an integrated and unified element anchored by its particularly strong horizontally defined corner elements.
- The proposal 'fits' comfortably within the structure of the existing Shopping Centre and approved Stage 1 form. The architectural expression integrates successfully with the massing and composition of the Centre, so that it appears as a proportionate and integrated element.
- The most challenging dimension of the proposed architectural treatment is the coexistence of major structural elements and associated ramp access to the southern profile of the building.



South-east view of secondary frontage from Kearney Drive

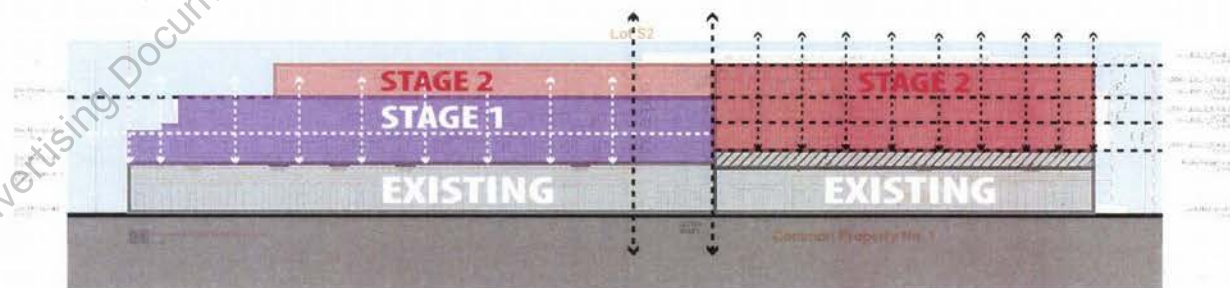


figure 11 massing and articulation diagram - north-west elevation



## B conclusion

The proposed development at 11-33 Narelle Drive, Aspendale Gardens, has been designed in response to the consideration of State and Local planning policy with regard to the site's location within a Neighbourhood Activity Centre, its commercial zoning and surrounding context.

The resultant scheme, as discussed in this report, represents a well-resolved opportunity to provide for residential intensification in a manner consistent with the urban character of Aspendale Gardens. Given the limited opportunities for urban consolidation which exists in the immediate context and surrounding residential hinterland it is important to maximise opportunities within the Activity Centre.

The proposal is responsive to key local planning policy seeking to achieve urban consolidation within activity centres and fits well with the site's context. The proposed adopts a massing and architectural expression which will successfully integrate and enhance the existing structure. The design incorporates materiality sympathetic to the domestic, earthy vernacular of the Aspendale Gardens area. It also includes a scale consistent with the desired future character of higher density residential development within NAC, acknowledging its important location as a transitional form between the commercial core, surrounding residential area.

Each apartment is well configured with good levels of amenity with access to natural light and ventilation. Dwellings are provided good outlook to surrounding streetscapes or internal courtyards. South and west facing dwellings enjoy views to green spaces. The pedestrian and vehicle access is clearly legible and defines the built form through recessions and breaks in elevations, establishing a built form that responds to the fine grain qualities of the surrounding streetscapes. Further, the proposal contributes greatly to the improvement of Aspendale Gardens NAC, establishing activated frontages, passive surveillance opportunities within the Centre.

The proposal will contribute to a central mass of immediate residents within the Centre which will ensure 'life' and activation of the streetscapes resulting in a more vibrant place and local community.

In conclusion, we consider the proposal to represent a considered and well-resolved urban design outcome that fits well in the future context of Aspendale Gardens NAC. This is a proposal which, in our opinion, warrants approval.



South-west view of main frontage from the corner Narelle Drive and Kearney Drive

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**Traffic Impact Report**

Aspendale Gardens Apartments – Stage 2

Prepared for: BC39 Pty Ltd

June 2015

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**BC39 Pty. Ltd**

June 2015

Our Reference: 11479rep04

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# 1 Introduction

Ratio Consultants Pty Ltd was commissioned by BC39 Pty Ltd to assess the traffic and parking implications of the proposal to develop a number of residential apartments above the existing Aspendale Gardens Shopping Centre in Aspendale Gardens. This report assesses the second stage of the development, with Stage 1 of the development having been issued a permit at the direction of VCAT (KP-519/2012).

Stage 1 of the development included 23 apartments and some 29 car spaces. The current application, Stage 2 relates to an additional 62 apartments and some 73 additional parking spaces.

This report has been prepared to address the parking and traffic matters of the proposed development and will be submitted to the City of Kingston.

The report is based on surveys and observations in the vicinity of the site, and of previous studies of similar developments elsewhere in Melbourne.

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## 2 Existing Conditions

### 2.1 Location and Environment

The site of the proposed development is located above the Aspendale Gardens Shopping Centre, which is located at 11-33 Narelle Drive, Aspendale Gardens. The shopping centre site is irregular in shape and has frontages to Narelle Drive (northwest), Hickman Avenue (northeast) and Kearney Drive (southwest). The site is within a Commercial 1 Zone (B1Z).

The shopping centre has a number of commercial tenancies totalling some 4,600sqm.

Vehicular access to the shopping centre is available from four points, one from Hickman Avenue (entry only), Narelle Drive and two from Kearney Drive (one of these operating as exit only). The main pedestrian access to the shopping centre is gained from the Narelle Drive frontage.

A primary school is located opposite the site to the southwest, on Kearney Drive and the Aspendale Gardens Community Centre is located to the southeast, adjacent to the shopping centre. The community centre is home to a pre-school, a community area and a sporting stadium. LL Stevenson Reserve is also located to the east of the shopping centre. The majority of other surrounding properties are residential in nature.

### 2.2 Road Network

**Narelle Drive** is classified as a Collector Road and operates in a north-south alignment between Wells Road and Kearney Drive. It provides direct access to a number of properties along its length including to the Aspendale Gardens Shopping Centre and performs a collector function for the Aspendale Gardens catchment. It has a carriageway width of approximately 10.2m which is sufficient to allow two-way traffic flow and parallel, on-street parking on both sides of the road. In the vicinity of the site, Narelle Drive carries a posted speed limit of 40km/hr, increasing to 50km/hr as it approaches Hickman Avenue towards the northern corner of the site. Narelle Drive connects to Wells Road (Primary State Arterial Road) at its northern end with a signalised intersection. There is a 'Local Traffic Only' sign facing traffic entering Narelle Drive from Wells Road.

**Hickman Avenue** is classified as a Local Street and operates roughly in an east-west alignment between Narelle Drive and Nurten Parade. It provides direct access to a number of residential properties along its length as well as entry to the rear access lane to the shopping centre which operates one-way north to south. It has a carriageway width of approximately 8.6m and allows parking on both sides of the road. Hickman Avenue carries the default speed limit for a built up area of 50km/hr.

**Kearney Drive** is classified as a Collector Road in the vicinity of the site and operates in a northwest – southeast alignment between Nurten Parade and the culs-de-sac at the western end. From Bianca Drive to its western terminus, Kearney Drive is classified as a Local Road. Kearney Drive has a carriageway width of approximately 10.1m and has marked parallel parking on both sides of the road and provides for two-way traffic flow. Kearney Drive carries a posted speed limit of 40km/hr in the vicinity of the site, increasing to 50km/hr to the southeast of the site.

### 2.3 Parking Conditions

In order to determine the current parking conditions in the vicinity of the subject site, Ratio Consultants Pty Ltd previously conducted surveys of parking demand in the vicinity of the subject site on Thursday 18 July 2013 from 10:00am to 7:00pm and on Saturday 20 July 2013 from 11:00am to 3:00pm. The extent of the survey area is shown in Figure 3.1 of Appendix A, with the detailed survey results presented in Tables 3.1 and 3.2 of Appendix A.



In summary, the survey results showed:

- There were 225 publicly available off-street parking spaces within the shopping centre site.
- In addition, there were 77 publicly available on-street parking spaces in the vicinity of the site.

#### Thursday 18 July 2013

- The overall demand for parking was moderate throughout the survey period, with the overall occupancy level varying between 26% and 56% throughout the survey period.
- The peak parking demand for the shopping centre on the Thursday survey period occurred at 2:00pm, when 151 parking spaces were recorded as being occupied out of a total of 225 spaces. This represents a peak occupancy of 67%, with 74 spaces being available within the shopping centre. At this time, there were also 58 on-street parking spaces available, or 132 spaces in total.

#### Saturday 20 July 2013

- The overall demand for parking was moderate throughout the survey period, with the overall occupancy level varying between 29% and 46% throughout the survey period.
- The peak parking demand for the shopping centre on the Friday period occurred at 1:00pm, when 131 parking spaces were recorded as being occupied out of a total of 225 spaces. This represents a peak occupancy of 58%, with 94 spaces being available within the shopping centre. At this time, there were also 68 on-street parking spaces available, or 162 spaces in total.

On the basis of the parking surveys undertaken, I am of the opinion that both the shopping centre parking area and the surrounding on-street parking areas experience low to moderate demands during both weekdays and weekends.

## 2.4 Public Transport

The site has limited access to public transport, with Bus Route 708 being the single service operating in the vicinity of the site. The nearest bus stops are located on Wells Road, approximately 370 metres to the north of the site. Bus Route 708 operates a half-hourly service between Hampton and Carrum and provides access to Mordialloc Railway Station which is approximately 3.8km to the north.

## 2.5 Crash Analysis

A review has been conducted of VicRoads 'Crashstats' data base for the most recent five year period of available data from 1 July 2008 to 30 June 2013 for any reported casualty crashes in the vicinity of the site.

The analysis revealed no casualty crashes within the vicinity of the site along Narelle Drive, Kearney Drive, and Hickman Avenue or at any of the roundabouts where these roads intersect. This indicates there are no significant traffic safety issues in the vicinity of the site.

### 3 The Proposal

It is proposed to construct an additional 62 apartments above the existing shopping centre, which is the second stage of a two-stage residential development above the shopping centre. The car park approved as part of the Stage 1 application will remain unchanged. Vehicular access will continue to be provided via a ramped access over the existing car parking at the southern end of the shopping centre building. The top of the ramp has been modified to cater for simultaneous two-way vehicle movements.

The proposed development as depicted on the application plans incorporates 62 additional dwellings, comprised as follows:

- 28 x one-bedroom dwellings;
- 28 x two-bedroom apartments;
- 6 x three-bedroom apartments;
- A new upper parking level providing 72 parking spaces with both at-grade and car stacker spaces. In addition, 5 parking spaces are available beneath the access ramp within the Applicant's title;
- Vehicular access to the car parking level via a ramp to the shopping centre car park;
- Bicycle storage racks within the Stage 1 car park;
- Rubbish storage areas on the parking level; and
- Pedestrian access to the apartments will be via two sets of lifts and stairs located at the eastern and western corner of the development.

## 4 Parking Assessment

Parking requirements for residential developments are set out under Clause 52.06 of the Victoria Planning Provisions. The purpose of the Clause, amongst other things, is:

- To ensure that car parking is provided in accordance with the State Planning Policy Framework and Local Planning Policy Framework.
- To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- To support sustainable transport alternatives to the motor car.
- To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
- To ensure that car parking does not affect the amenity of the locality.
- To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enable easy and efficient use.

The number of car parking spaces required for the specified uses is listed under Table 1 of Clause 52.06-5 and are as follows:

- One resident space to each one or two bedroom dwelling;
- Two resident spaces to each three or more bedroom dwelling; and
- One visitor space for every five dwellings for developments of five or more dwellings.

Application of the above rates to the Stage 2 development produces the following statutory parking requirement, noting that parking calculations are to be rounded down in accordance with Clause 52.06 of the Planning Scheme:

56 x two-bedroom dwellings @ 1.0 resident space each:	56 spaces
6 x three-bedroom dwelling @ 2.0 resident spaces each:	12 spaces
62 x dwellings @ 1.0 visitor space per every 5 dwellings:	12 spaces
<b>TOTAL:</b>	<b>80 spaces</b>

With a total of 72 parking spaces provided within the on-site car park, and 5 spaces provided within the shopping centre car park (beneath the access ramp), there is a 3 space reduction sought as part of the proposal. It is proposed that this reduction be attributed with the visitor parking requirement associated with the proposal.

Under the provisions of Clause 52.06, the Responsible Authority is able to reduce the parking requirements (including reduced to zero), provided the applicant satisfies the responsible authority that the provision of car parking is justified on the basis of:

- The car parking demand likely to be generated by the use;
- Whether it is appropriate to allow fewer spaces to be provided than the number likely to be generated by the use.

An assessment of the expected parking demand and the appropriateness of allowing a reduction of on-site parking for the proposed development are discussed below:



## Car Parking Demand Assessment - Visitor Parking

Surveys undertaken by Cardno Pty Ltd of visitor parking demands at residential developments in inner suburbs of Melbourne indicate that visitor-parking demand varies throughout the day, with peak demands occurring between 6.00pm and 9.00am. The surveys showed the peak visitor parking demand during business hours between 9.00am and 5.00pm on a weekday was 0.07 spaces per dwelling. Outside business hours on weekdays, the peak visitor parking demand was equivalent to 0.12 spaces per dwelling.

On the basis of the nature and location of the proposed development, with relatively poor access to public transport, it is considered that a peak visitor parking demand rate of 0.15 spaces per apartment is appropriate, with a reduced rate of 0.10 spaces per apartment during weekday daytime periods.

On this basis, it is expected the 62 apartment development will generate a visitor parking demand of between 6 and 9 spaces.

With 4 spaces provided on the upper parking level and 5 spaces beneath the access ramp, the proposed visitor parking provision is expected to meet the expected peak visitor parking demand. It is noted that visitors utilising the spaces beneath the ramp would have access to the residential levels via the lobby located on the eastern side of the building. Any overflow visitor parking demands that may occur would be accommodated within the shopping centre car park.

Furthermore, the previous VCAT decision noted that it was accepted that some visitors may prefer the convenience of parking within the shopping centre if it was readily available within close proximity to the pedestrian entrance. VCAT acknowledged that this scenario was acceptable given that it would have no adverse impact on the shopping centre, as shoppers would also be able to readily find car parking.

### 4.1 Allowing Fewer Spaces to be Provided

Clause 52.06-6 sets out the factors to be considered when determining the appropriateness of allowing fewer car parking spaces to be provided. Some of the relevant factors for this case are listed below:

- The availability of car parking
- Access to or provision of alternative transport modes to and from the land
- Any parking deficiency associated with the existing use of the land
- The practicality of providing car parking on the site

Those factors relevant to this assessment are discussed in more detail below:

#### Availability of Parking

As discussed above, during peak times (i.e. outside business hours on weekdays and on weekends), there could be a visitor parking demand of up to 9 spaces. A total of 4 visitor spaces have been provided within the upper parking level and there are also 5 parking spaces within the Applicant's title which are located beneath the main access ramp that accesses the upper parking level. Accordingly, the proposed visitor parking provision is considered acceptable and will accommodate the expected visitor parking demand.

The parking occupancy surveys outlined in Section 2.3 of this report confirm that there is ample parking available within the shopping centre and surrounding on-street parking areas to cater for any additional visitor demand that may occur. The weekday parking survey showed 149 parking spaces as being available within the shopping centre car park after 6:00pm and the weekend surveys showed a minimum 94 spaces as being available. Accordingly, any overspill visitor parking could be accommodated within the shopping centre car parking.

## 4.2 Vehicular Access

Access to the on-site parking areas is provided by a ramp that is proposed across a row of existing parking spaces. Design Standard 3 of Clause 52.06-8 to the Planning Scheme provides guidance with regards to the appropriate gradients that should be provided, whilst Clause 2.5.2 (a) of AS/NZS2890.1:2004 provides design guidance with respect to the width of ramps.

Figure 2.8 of Clause 2.5.2 of AS/NZS2890.1:2004 specifies that two-way circulation roadways should be at least 5.5m wide, with 300mm wide kerbs provided if there are barriers such as retaining walls present on either side. The ramp depicted on the application plans complies with this requirement. The swept path diagram attached to this report in Appendix B depicts the ability for two-way vehicle flow to be achieved along the length of the vehicle access ramp.

A second ramp is provided to connect to/from the new car parking area. The ramp has a gradient of 1:8 which complies with the gradients of the Planning Scheme and AS/NZS 2890.1:2004. The ramp will have a width of 5.5 metres which will allow for simultaneous two-way vehicle movements. However, it is noted that at the Stage 2 car park entrance two-way movement has not been allowed for. As such, a hold line and convex mirror has been provided to allow drivers to see oncoming vehicles and to yield accordingly. This is considered a suitable design outcome given the low number of vehicle trips generated by the proposed development.

On the basis of the above, the vehicular access arrangements are considered acceptable.

## 4.3 Parking Layout

The parking spaces shown on the application plans are generally arranged in a conventional, 90 degree layout. The parking spaces are noted as having minimum dimensions of 2.6m wide by 4.9m long with a 6.4m wide aisle. This meets the minimum Planning Scheme requirements.

The plans also show the presence of columns within the car park. The location of the columns accords with the location requirements illustrated in Diagram 1 of Clause 52.06-8 of the Planning Scheme, with the setbacks being greater than 250mm from the front of the spaces and extending no further than 1250mm from the front of the spaces. Accordingly, the column locations comply with the Planning Scheme requirements.

A number of parking spaces are located at the end of the parking aisles, which are known as blind aisles. Suitable aisle extensions have been provided to allow access to these parking spaces.

A number of car stacker spaces are provided within the development. The specifications for suitable car stacker models are attached to this report in Appendix C (Klaus Multibase 2072 and Klaus Trendvario 4300). All bays are in general accordance with the dimensional requirements of AS/NZS 2890.1:2004 with any discrepancies in accordance with the manufacturer's requirements. All bays within the system had been assessed for 2.4 metre wide platforms accessed via a minimum 6.2 metre aisle.

Design Standard 4 of Clause 52.06-8 requires at least 25% of stacker spaces to have a headroom clearance greater than 1.8m. Based on the 1.7m pit and 3.5m of headroom provided, vehicles up to 1.8m in height could be accommodated on the upper platforms, thereby exceeding the 25% requirement.

The swept paths attached to Appendix B of this report show acceptable ingress and egress movements to and from all critical spaces within the upper parking level. It is noted that car parking spaces 38, 39, 52, 67, and 68 have been designated as small car parking spaces, in accordance with Clause 2.4 (a)(iii) of AS/NZS 2890.1:2004. Some vehicles will find it easier to reverse into some of the parking spaces, which is in accordance with Clause B4.3 of AS/NZS 2890.1:2004.

On the basis of the assessment above, it is considered that the development will provide suitable parking arrangements for residents and their visitors.



#### 4.4 Bicycle Facilities

The provisions set out under Clause 52.34 of the Kingston Planning Scheme establish the requirement for bicycle parking spaces applicable to this development, as follows:

- 1 resident bicycle space per five residential dwellings (for developments of four or more storeys); and,
- 1 visitor bicycle space per ten residential dwellings (for developments of four or more storeys).

Under Clause 52.34, the application requires 18 additional bicycle parking spaces (12 resident spaces and 6 visitor spaces). The plans show the provision for a bicycle storage area for 25 spaces. On this basis the requirements would be met, with the total requirement for Stage 1 and 2 being 25 spaces.

#### 4.5 Refuse Collection

It is understood that it is planned to collect waste from within the parking level, requiring a truck to drive up to the parking level, turn around, collect the waste and depart via the access ramp. The swept path diagram attached to Appendix B of this report demonstrates the ability a small truck to turn around within the parking level through a simple three-point manoeuvre. Further, a small truck could comfortably negotiate the gradients proposed on the access ramp. On this basis, the proposal to collect waste from within the upper parking level is considered to be acceptable.

#### 4.6 Loading Arrangements

It is noted that a column will be provided adjacent to the existing loading bay for the shopping centre. In addition, the proposed eastern pedestrian lobby will impeded the current loading access. A swept path assessment has been provided within Appendix B, which demonstrate that suitable access will be maintained to/from the existing loading area following the installation of the column and lobby. Accordingly, it is considered that the loading area will continue to operate in an effective manner.



## 5 Traffic Assessment

### 5.1 Traffic Generation and Impacts

Based on surveys of apartment developments in middle urban areas conducted by Ratio Consultants Pty Ltd, the proposed residential development could be expected to generate traffic at a rate up to 5 vehicle trips per day for each of the apartments. This equates to 310 trips per day from Stage 2.

About 10% of the total trips (i.e. 31 trips) will occur in each of the morning and evening peak hours. Trips will be mainly departing (80% out and 20% in) during the AM peak and mainly arriving in the PM peak (60% in and 40% out). So, for example in the AM peak hour on a typical weekday, the traffic generation for the residential apartments will be:

› Arriving trips	7
› Departing trips	25
› Total trips	32

The additional traffic demand generated by the proposed apartments is likely to flow directly onto Kearney Drive and then onto the surrounding road network. Entering traffic associated with the apartments can do so via the existing full-movement access to Kearney Drive. Traffic departing the apartments is likely to choose Kearney Drive due to its proximity to the ramp.

It is considered that the adjacent roads have the ability to accommodate the relatively modest increase in traffic volume associated with the proposed development (around one additional trip on the network approximately every 2 minutes) without creating adverse traffic safety or operational impacts on traffic flows within the shopping centre nor on the adjacent road network.

## 6 Conclusion

Based on the above considerations, it is considered:

- The proposed provision of 77 on-site parking bays will cater for the typical resident and visitor parking demands generated by the proposed development. Any overflow in visitor demands that may occur could be accommodated within the shopping centre car park.
- The resident and visitor bicycle parking provisions meets the requirements of the Planning Scheme with dimensions in accordance with Australian Standards.
- The proposed parking layout and associated access arrangements have been suitably designed and are in accordance with the Planning Scheme and AS/NZS2890.1:2004 requirements.
- The development is expected to generate about 310 vehicle trips per day, with about 31 trips per hour during peak hours, or one trip every two minutes or so. This traffic will be dispersed onto Kearney Drive in the first instance and then the adjacent road network and is not expected to create any adverse traffic safety or capacity problems.

It is therefore concluded that from a traffic engineering perspective that the proposed residential development should be permitted to proceed as currently proposed.

---

## APPENDIX A

### Survey Results

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Project : 11479 August 2013

ratio

FIGURE 2.1  
PARKING SURVEY AREAS



## Parking Occupancy Survey

Location Aspendale Garden Shopping Center  
 Date Thursday, 18 July 2013  
 Weather Mild And Overcast

Ratio Map Ref	Street	Section	Side	Restriction	Capacity	Parking Occupancy									
						10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
A				Unrestricted	103	33	37	40	50	58	50	45	40	32	28
				Disabled	3	0	0	0	0	0	0	0	0	0	0
B				Unrestricted	65	31	36	40	45	41	40	39	31	30	25
				Disabled	3	0	1	2	2	1	1	0	1	0	0
C				Unrestricted	33	24	27	29	33	33	30	28	27	25	16
				Disabled	2	0	0	2	2	2	1	2	1	1	0
D				Unrestricted	16	13	15	16	16	16	15	13	12	10	7
				Loading zone	11	2	3	4	6	5	3	2	2	2	1
E	Kearney Drive	Narelle to Nurten	E	Unrestricted	8	4	6	5	5	4	7	5	5	4	3
				No standing 8:15am-9:15am, 3pm-4pm school days	4	0	0	0	0	0	0	0	0	0	0
F	Kearney Drive	Narelle to Nurten	W	Unrestricted	9	4	6	7	7	7	7	7	7	7	1
				No standing 8:15am-9:15am, 3pm-4pm school days	4	0	0	0	0	0	0	0	0	0	0
G	Narelle Drive	Hickman to Kearney	N	Unrestricted	8	1	2	3	3	2	3	3	3	3	0
H	Narelle Drive	Hickman to Kearney	S	Unrestricted	9	0	0	0	0	0	0	0	0	0	0
I	Hickman Ave	Narelle to Chris	E	Unrestricted	7	0	0	1	2	3	2	1	1	1	0
J	Hickman Ave	Narelle to Chris	W	Unrestricted	14	1	1	1	2	2	1	2	1	1	0
K	Hickman Ave	Chris to Keaton	N	Unrestricted	5	0	0	1	1	1	1	1	1	0	0
L	Hickman Ave	Chris to Keaton	S	Unrestricted	9	0	0	0	0	0	0	0	0	0	0
PUBLIC CAPACITY						302	302	302	302	302	294	294	302	302	302
PUBLIC OCCUPANCIES						111	131	147	168	170	158	146	130	114	80
PUBLIC VACANCIES						191	171	155	134	132	136	148	172	188	222
PUBLIC % OCCUPANCIES						37%	43%	49%	56%	56%	54%	50%	43%	38%	26%
not available for public parking															

11479 survey analysis

Parking Occupancy Survey

Location Aspendale Garden Shopping Center  
 Date Saturday, 20 July 2013  
 Weather Mild And Overcast

Ratio Map Ref	Street	Section	Side	Restriction	Capacity	Parking Occupancy				
						11:00	12:00	13:00	14:00	15:00
A				Unrestricted	103	46	46	51	41	31
				Disabled	3	0	0	0	0	0
B				Unrestricted	65	33	38	45	40	30
				Disabled	3	0	0	0	0	0
C				Unrestricted	33	22	22	22	19	16
				Disabled	2	1	1	1	1	1
D				Unrestricted	16	10	12	12	10	7
				Loading zone	11	3	3	3	3	3
E	Kearney Drive	Narelle to Nurten	E	Unrestricted	8	1	1	3	2	1
				No standing 8:15am-9:15am, 3pm-4pm school days	4	0	0	0	0	0
F	Kearney Drive	Narelle to Nurten	W	Unrestricted	9	0	1	1	1	0
				No standing 8:15am-9:15am, 3pm-4pm school days	4	0	0	0	0	0
G	Narelle Drive	Hickman to Kearney	N	Unrestricted	8	2	2	2	2	2
H	Narelle Drive	Hickman to Kearney	S	Unrestricted	9	0	0	0	0	0
I	Hickman Ave	Narelle to Chris	E	Unrestricted	7	0	0	0	0	0
J	Hickman Ave	Narelle to Chris	W	Unrestricted	14	0	0	0	0	0
K	Hickman Ave	Chris to Keaton	N	Unrestricted	5	1	2	3	1	1
L	Hickman Ave	Chris to Keaton	S	Unrestricted	9	0	0	0	0	0
PUBLIC CAPACITY						302	302	302	302	302
PUBLIC OCCUPANCIES						116	125	140	117	89
PUBLIC VACANCIES						186	177	162	185	213
PUBLIC % OCCUPANCIES						38%	41%	46%	39%	29%
not available for public parking										



---

## APPENDIX B

### Swept Path Assessment

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Dear Luke,

22 December 2015

Luke Dowdle  
Director  
Nepean Planning Consultants  
Via email:  
[luke@nepeanplanning.com.au](mailto:luke@nepeanplanning.com.au)**Application No KP-519/2012/A  
11-33 Narelle Drive, Aspendale Gardens**

A further information request was received from the City of Kingston dated 10 July 2015 in relation to the above application, containing a number of queries in relation to car parking. These queries have been reviewed and are responded to as follows:

7. An updated traffic report that includes new traffic surveys as the 2013 surveys are outdated. The traffic report should also identify the change in the ramp arrangement outside of the title boundary.

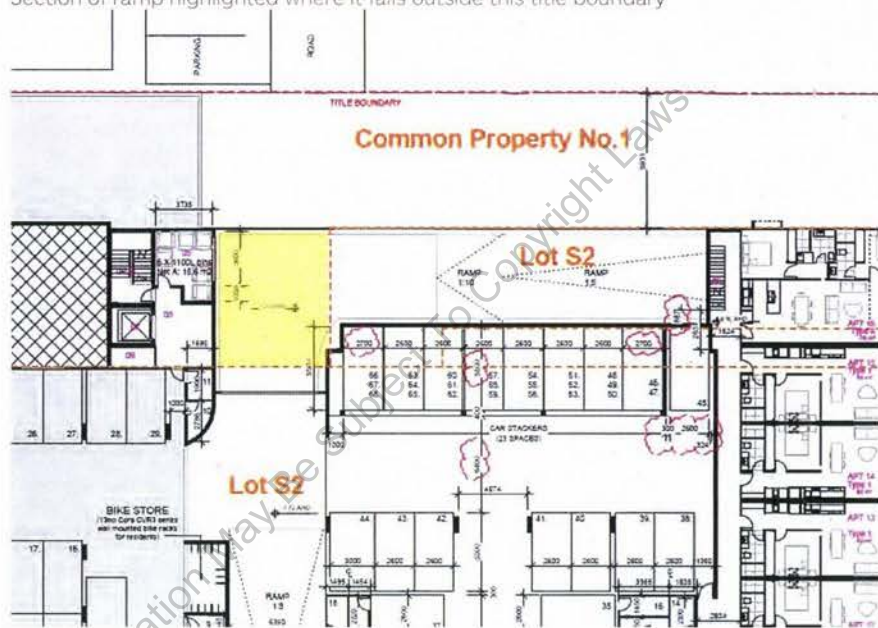
**Parking Surveys**

More up to date surveys are not considered necessary in order to assess the proposed reduction to the visitor car parking requirements. The car parking demand assessment outlined in the traffic report dated June 2015 concluded that the peak visitor demand would be 9 spaces. With 9 spaces provided for visitors on-site as part of the proposal (4 on the upper parking level and 5 beneath the access ramp), there will technically be no reliance on the shopping centre car parking to cater for visitor demands associated with the development. Notwithstanding this, a review of parking availability within the shopping centre car park using recent Nearmap aerial photographs does not suggest any noticeable change or increase in parking demands at the shopping centre. On this basis, no additional surveys are considered necessary.

**Ramp Arrangements**

The plan below identifies where the proposed access ramp falls outside the title boundaries.

**Figure 1**  
Section of ramp highlighted where it falls outside this title boundary



### Traffic and Parking Concerns

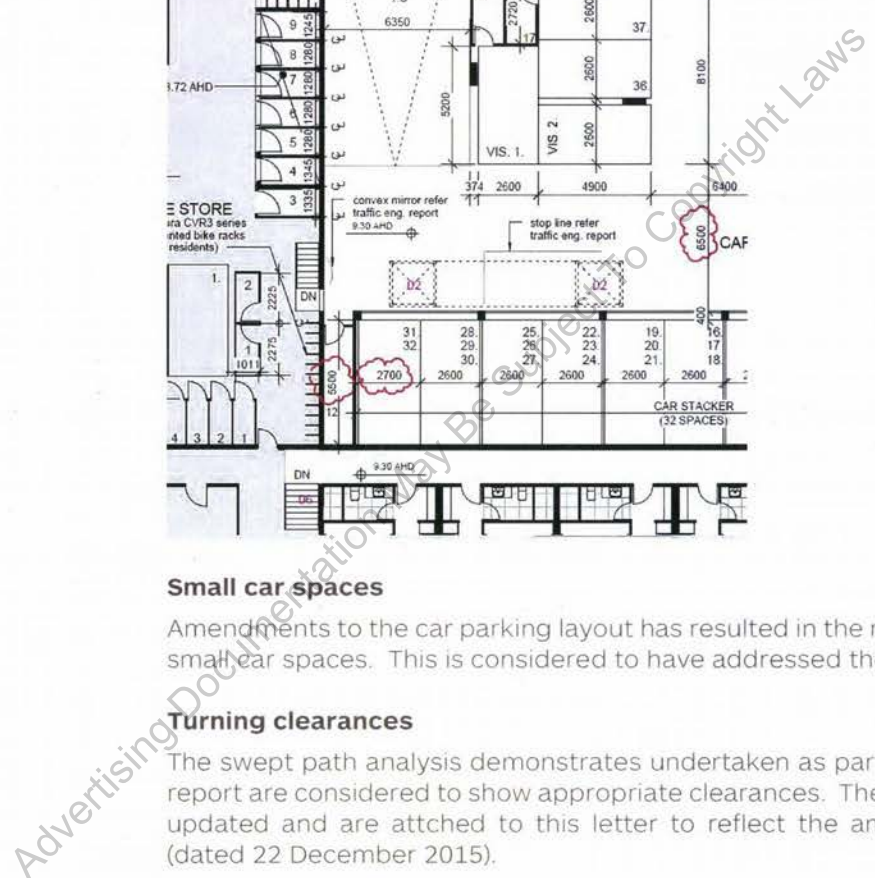
There are strong concerns with the functionality of the car parking area including not achieving two way access into Stage 2, the use of small car parking spaces, relevant turning clearances not being achieved, reduced accessway widths and the need to undertake multiple movements to enter and egress the parking spaces. Given an application for reduction is proposed, the floor plate of the building (plus extensions into common property are proposed) and the area is not proximate to alternative transport it is considered that the site constraints do not warrant trade-offs in compliance with Clause 52.06 and the Australian Standard.

### Two-way access to Stage 2

The access ramp connecting the Stage 1 and Stage 2 car park has been widened through the relocation of the steps that were previously running alongside it. This results in sufficient width now being provided to cater for simultaneous movements should they occur. A convex mirror and hold line is still suggested to be provided to facilitate the passing of vehicles at this point.



Hold line and convex mirror



Amendments to the car parking layout has resulted in the removal of the small car spaces. This is considered to have addressed these concerns.

The swept path analysis demonstrates undertaken as part of the traffic report are considered to show appropriate clearances. These have been updated and are attached to this letter to reflect the amended plans (dated 22 December 2015).

The accessway widths proposed all meet or exceed the 6.4m minimum width required under the Planning Scheme.

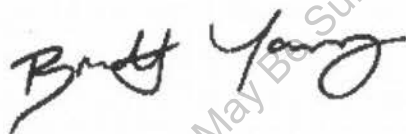
*Noting concerns with borrowed light to dwellings on this level, the area of the car park could be increased, with the dwellings reduced in depth and widened to achieve a better level of internal amenity.*

*Pedestrian safety within the car park should be further reviewed given the need for occupants to state 2 to enter stage 1 for storage and waste needs.*

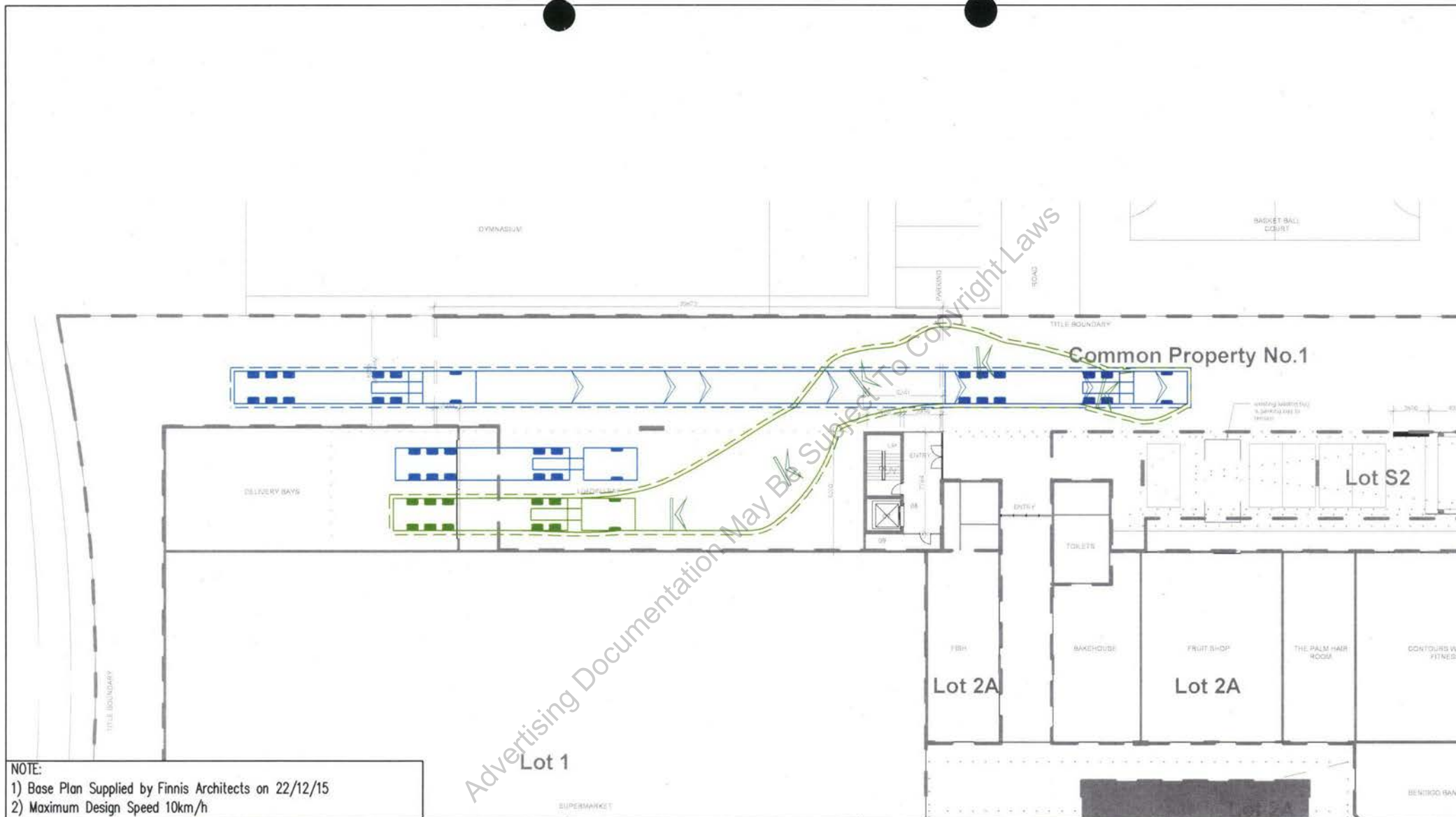
Stairs are now proposed adjacent to stacker spaces 31/32 which are considered to have addressed pedestrian safety concerns associated with the two parking areas.

On the basis of the above, the concerns raised by Council are considered to have been suitably addressed.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Brett Young', written in a cursive style.

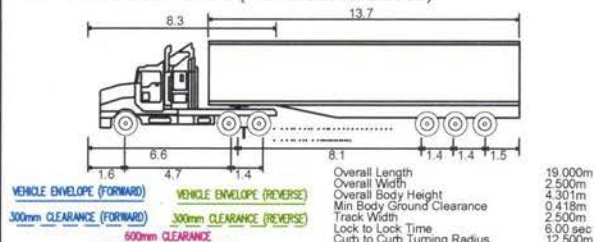
**Brett Young**  
**Director - Traffic**  
**Ratio Consultants**



# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

AV - Articulated Vehicle (AS/NZS2890.2:2002)



Aspendale Gardens  
Residential Development  
Swept Path Assessment



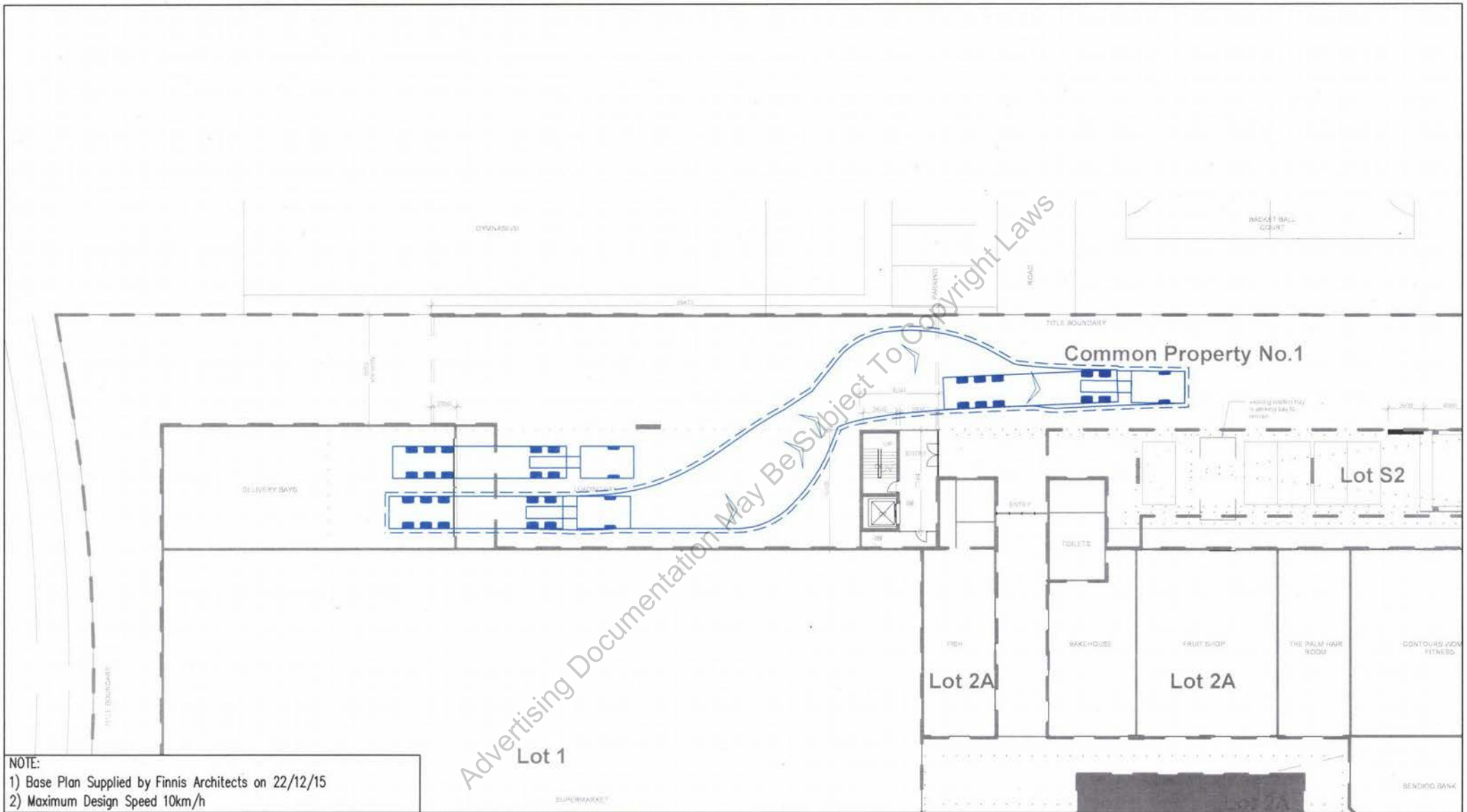
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22/12/2015





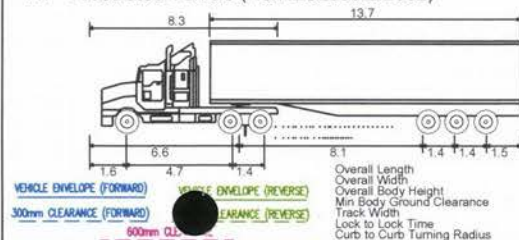
**NOTE:**

- 1) Base Plan Supplied by Finnis Architects on 22/12/15
- 2) Maximum Design Speed 10km/h

**ratio:**

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

AV - Articulated Vehicle (AS/NZS2890.2:2002)



Aspendale Gardens  
Residential Development  
Swept Path Assessment

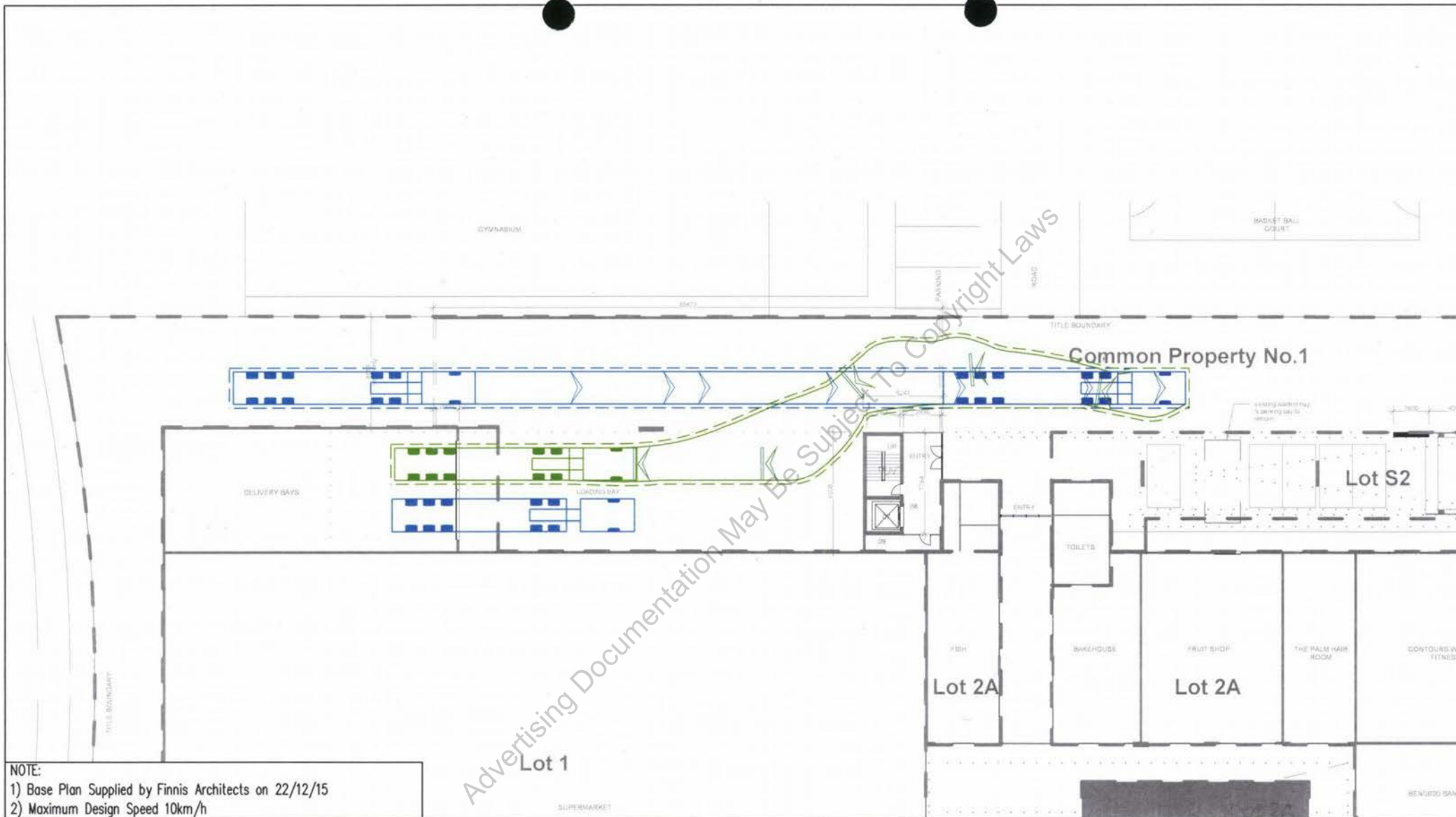


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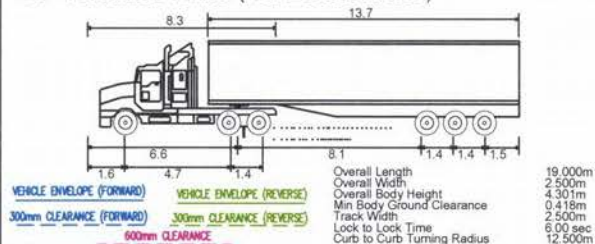
**NOTE:**

- 1) Base Plan Supplied by Finnis Architects on 22/12/15
- 2) Maximum Design Speed 10km/h

**ratio:**

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

AV - Articulated Vehicle (AS/NZS2890.2:2002)



Aspendale Gardens  
Residential Development  
Swept Path Assessment

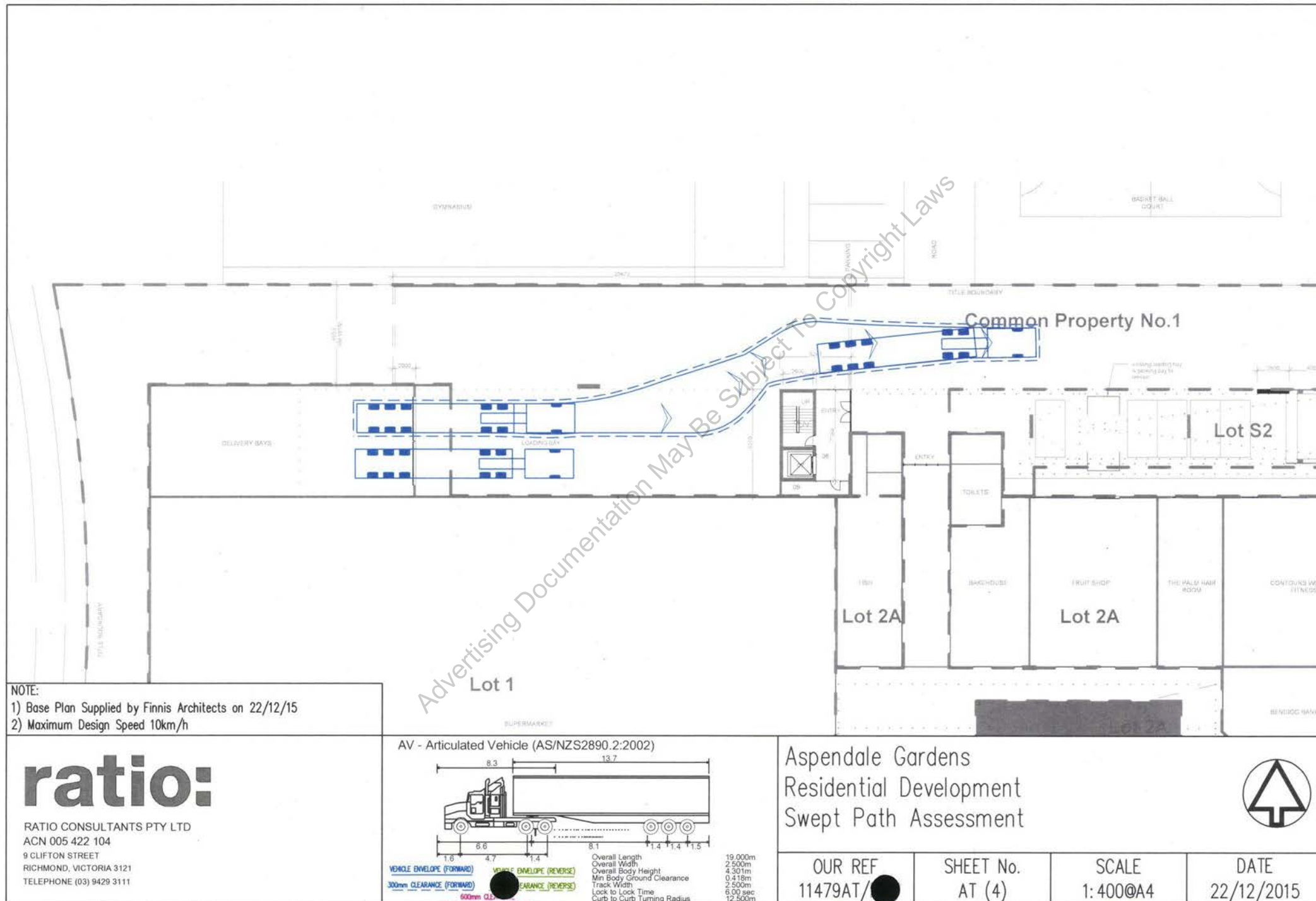


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DATE  
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## 392-1



1) Base Plan Supplied by Finnis Architects on 22/12/15  
2) Maximum Design Speed 10km/h

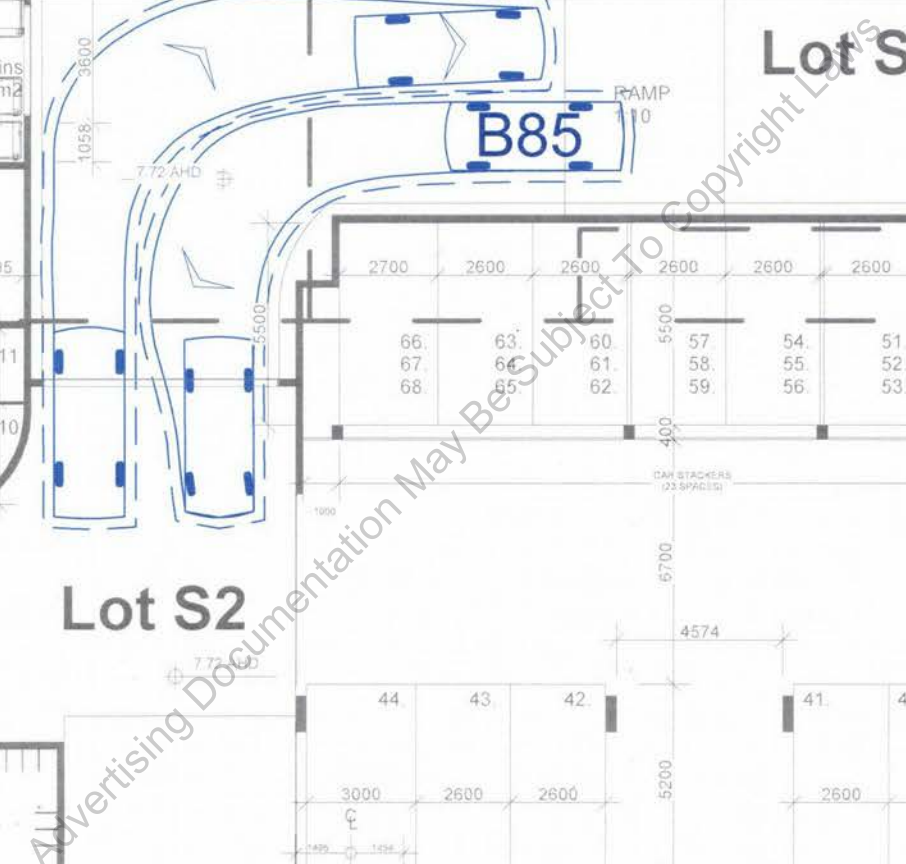
**RATIO CONSULTANTS PTY LTD**  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

A side-view diagram of a car. Above the car, a dimension line indicates a total length of 4.91. Below the car, two dimension lines are shown: one from the front bumper to the center of the front wheel, labeled 0.92, and another between the centers of the front and rear wheels, labeled 2.8.

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

DATE  
22/12/2015

## 8931

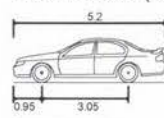


1) Base Plan Supplied by Finnis Architects on 22/12/15  
2) Maximum Design Speed 10km/h

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ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

5.2

0.95 3.05



Overall Length  
Overall Width  
Overall Body Height  
Min Body Ground Clearance  
Track Width  
Lock to Lock T  
Curb to Curb Turning Radius

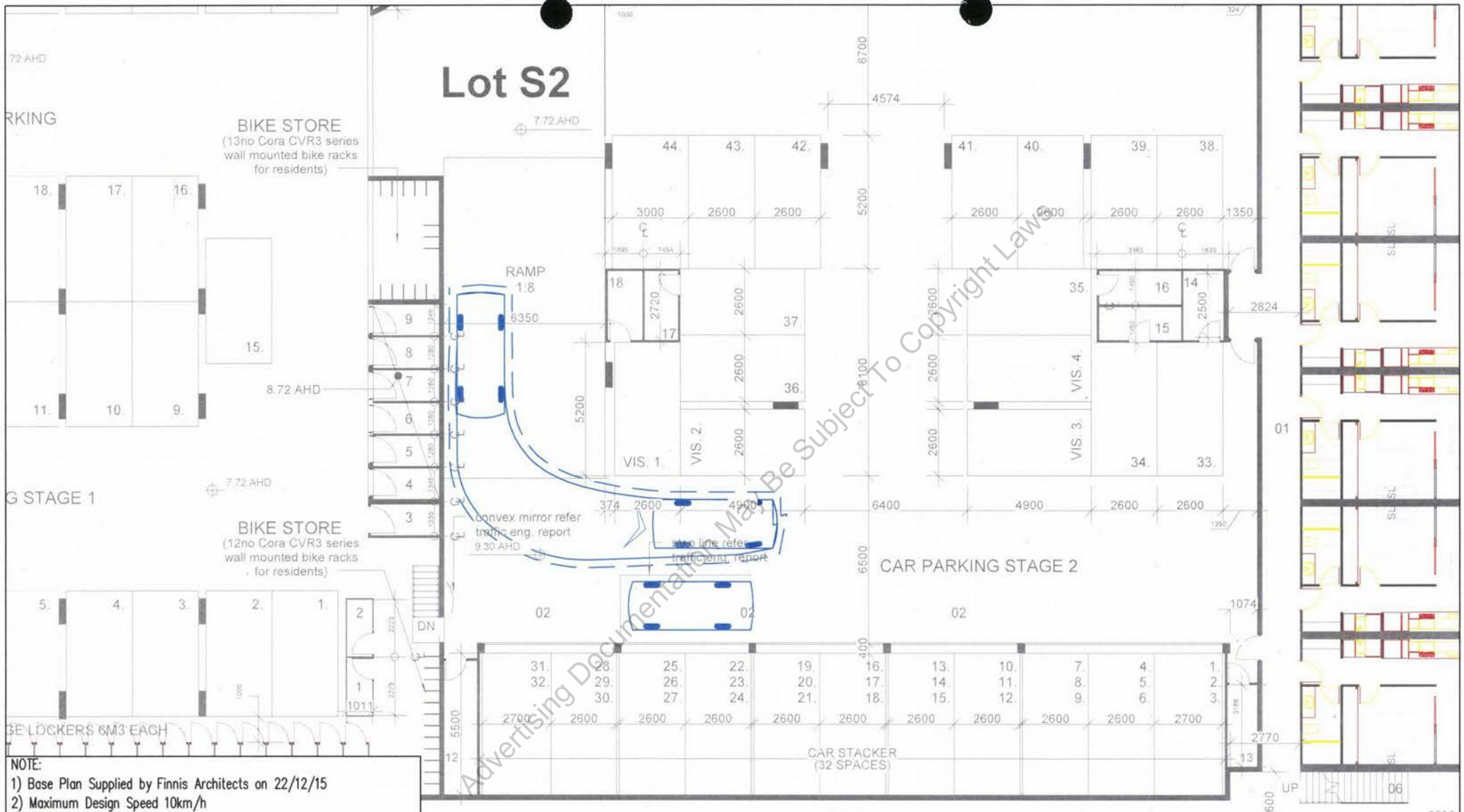
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DATE  
22/12/2015

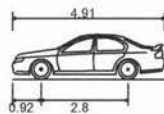




# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length  
Overall Width  
Overall Body Height  
Min Body Ground Clearance  
Track Width  
Lock to Lock Time  
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

4.910m  
1.870m  
1.421m  
0.159m  
1.770m  
4.00 sec  
5.750m

Aspendale Gardens  
Residential Development  
Swept Path Assessment

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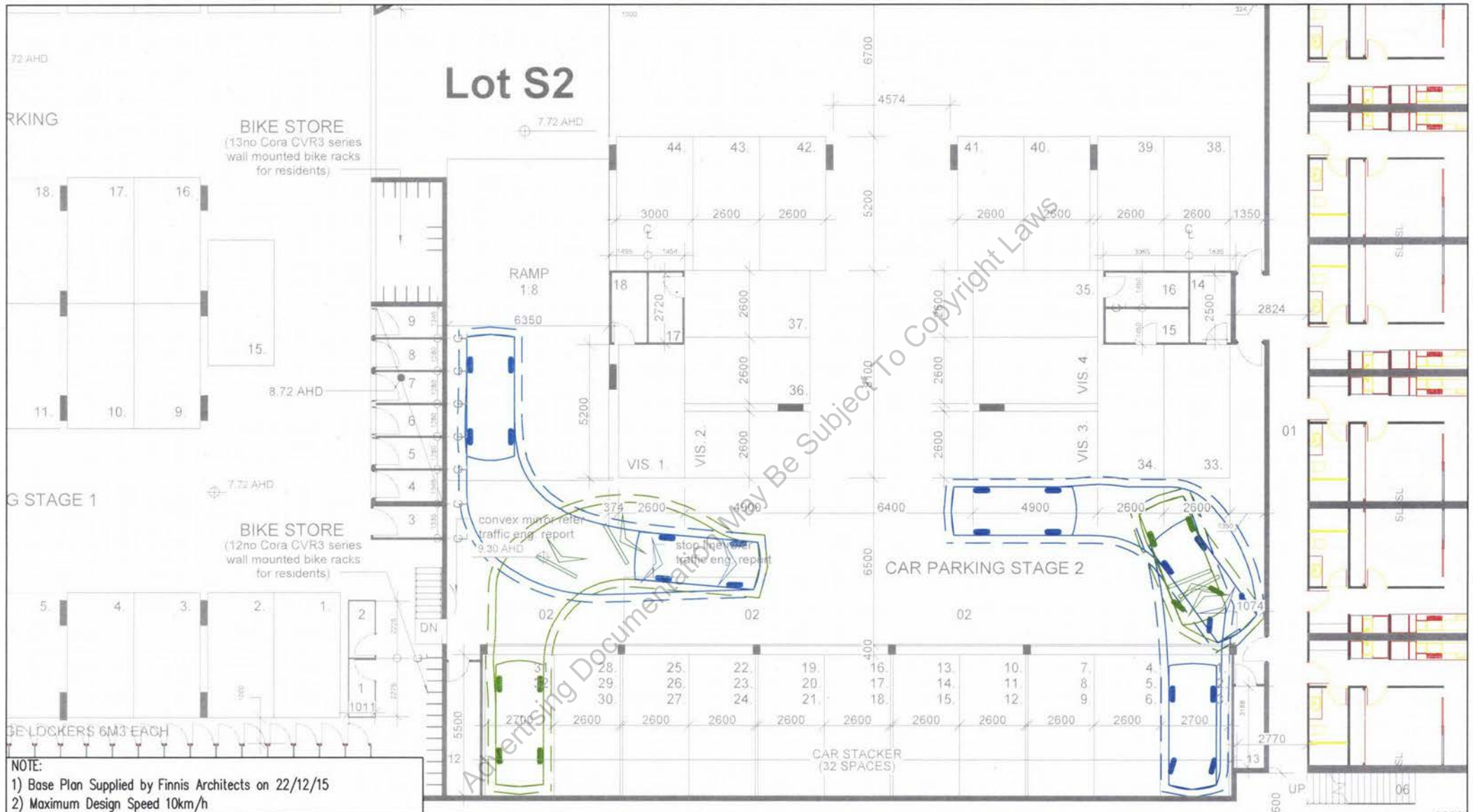
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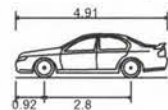




# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Turning Radius 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment

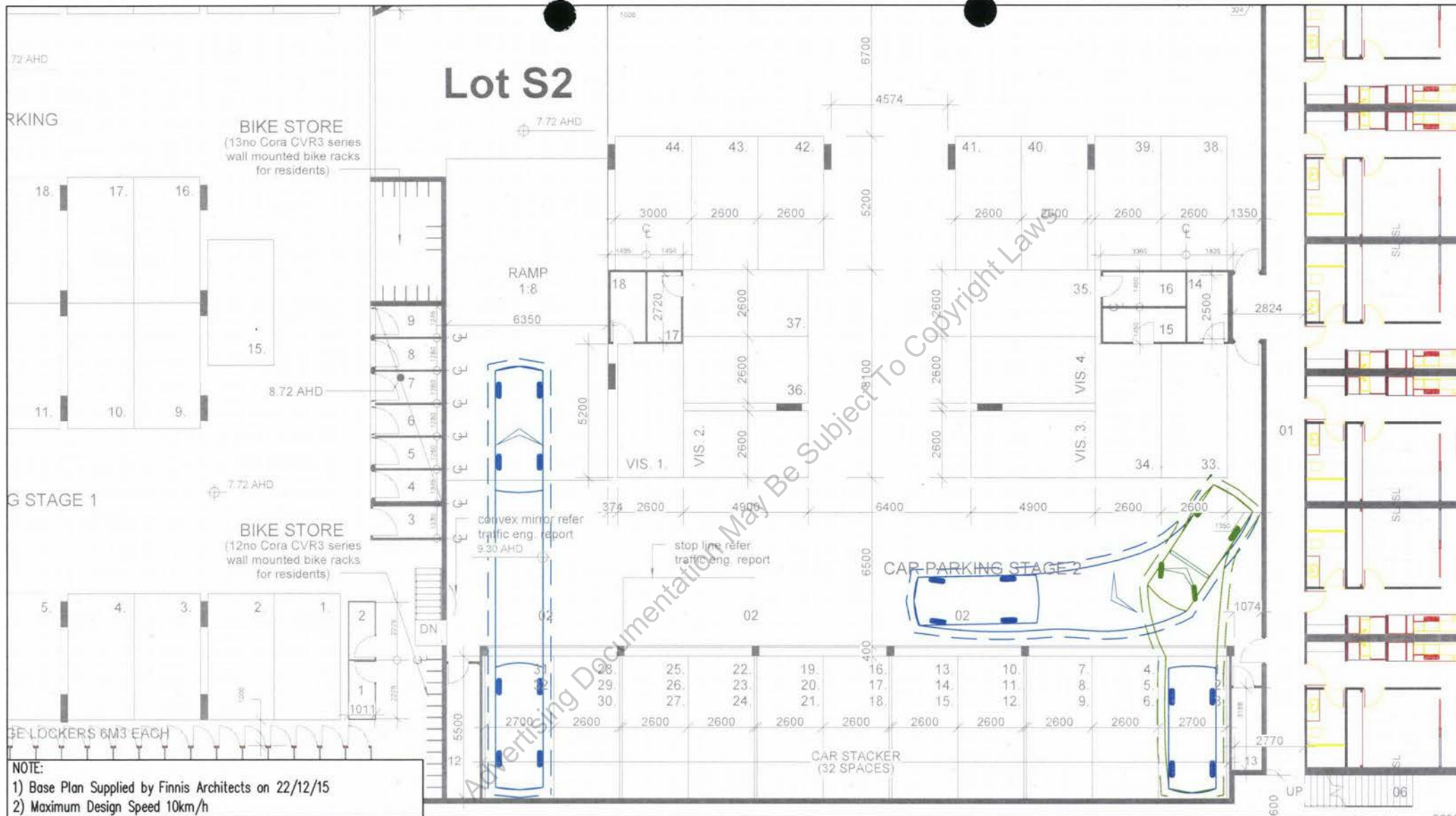


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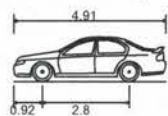
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# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



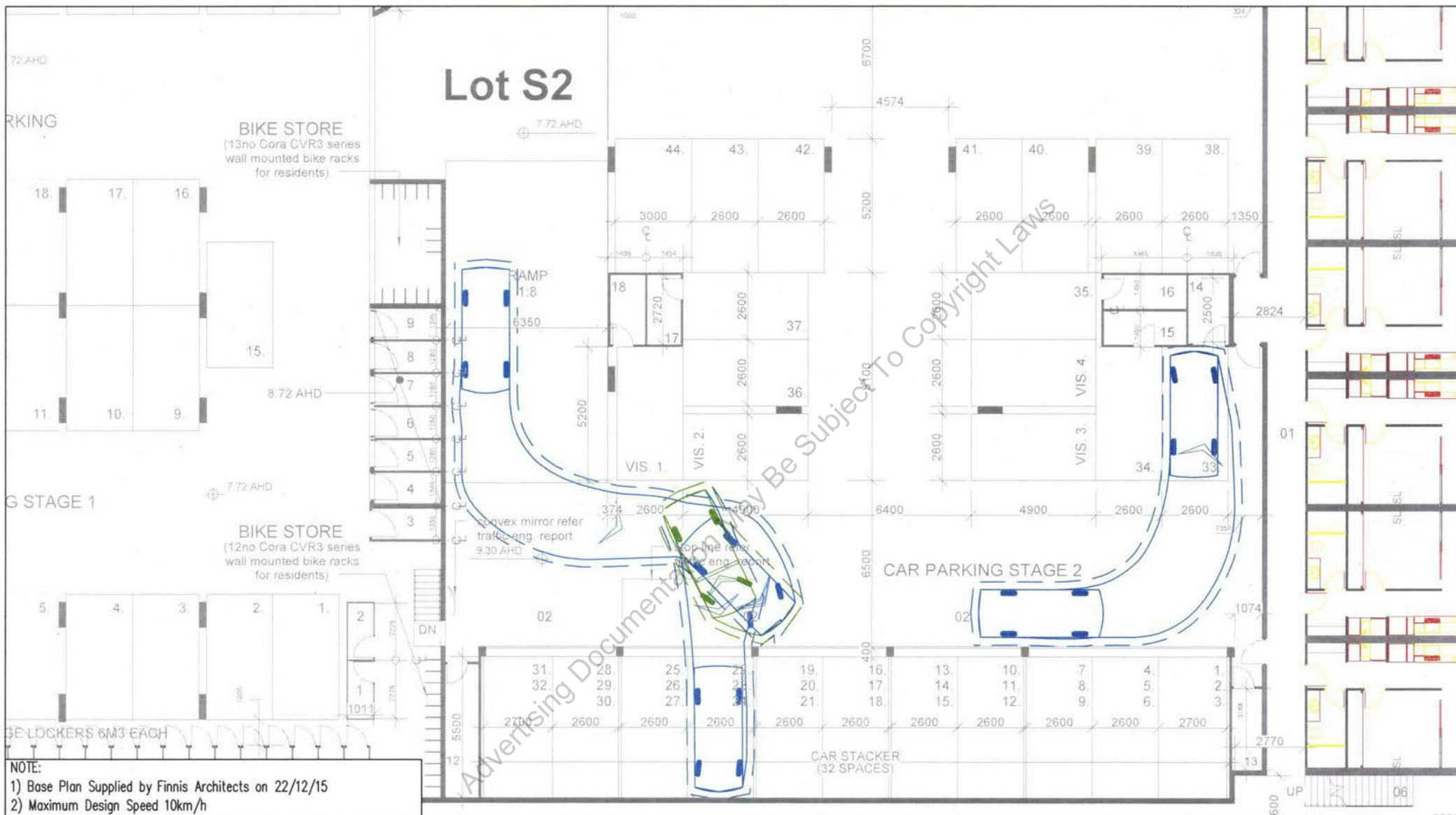
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22/12/2015





**ratio:**

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ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Turn Radius 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



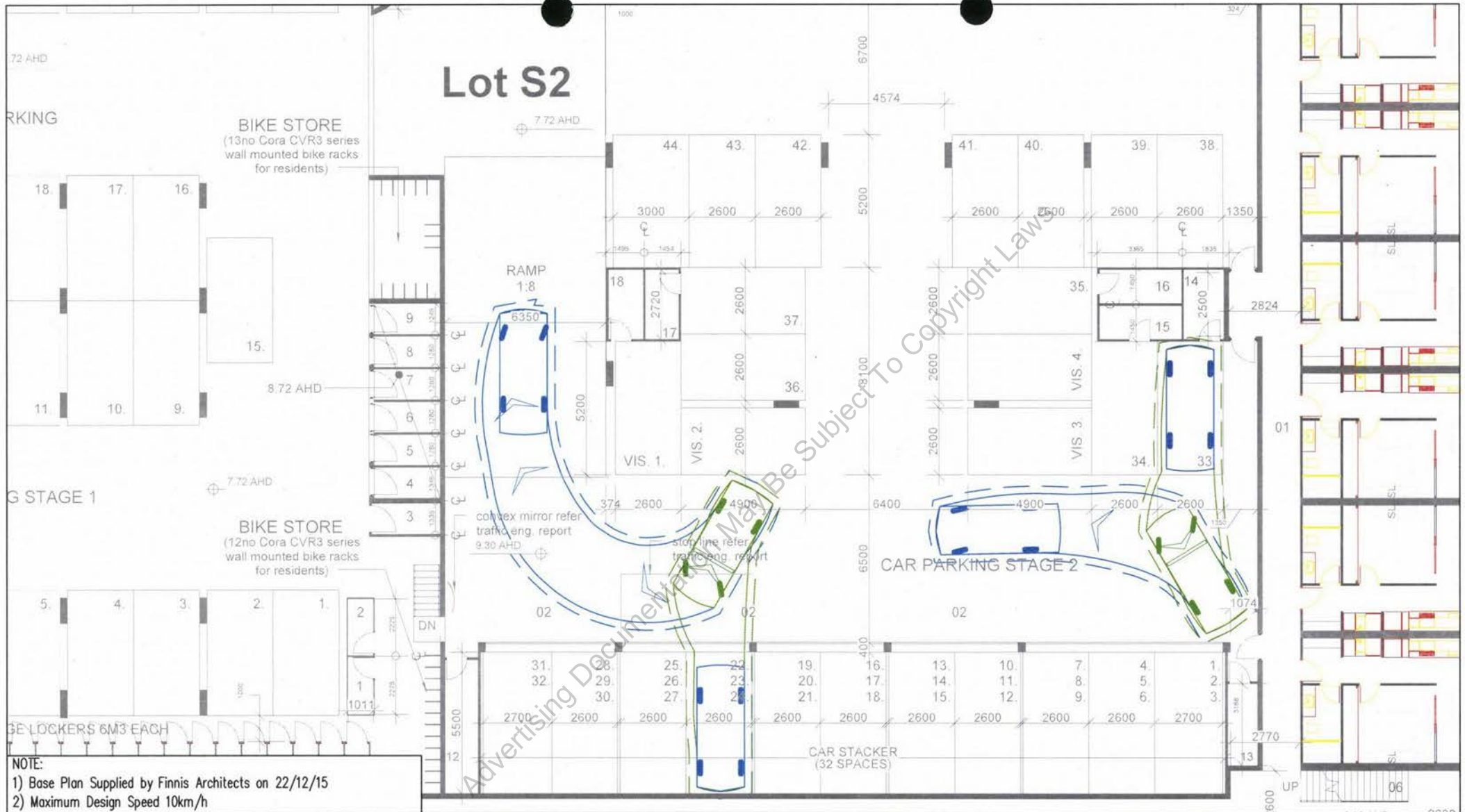
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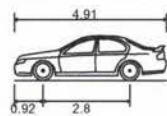
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#### B85 Vehicle (AS/NZS2890.1:2004)



Overall Length  
Overall Width  
Overall Body Height  
Min Body Ground Clearance  
Track Width  
Lock to Lock Time  
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

4.910m  
1.870m  
1.421m  
0.159m  
1.770m  
4.00 sec  
5.750m

#### Aspendale Gardens Residential Development Swept Path Assessment



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22/12/2015

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ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111



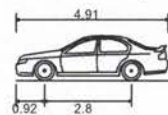




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RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment

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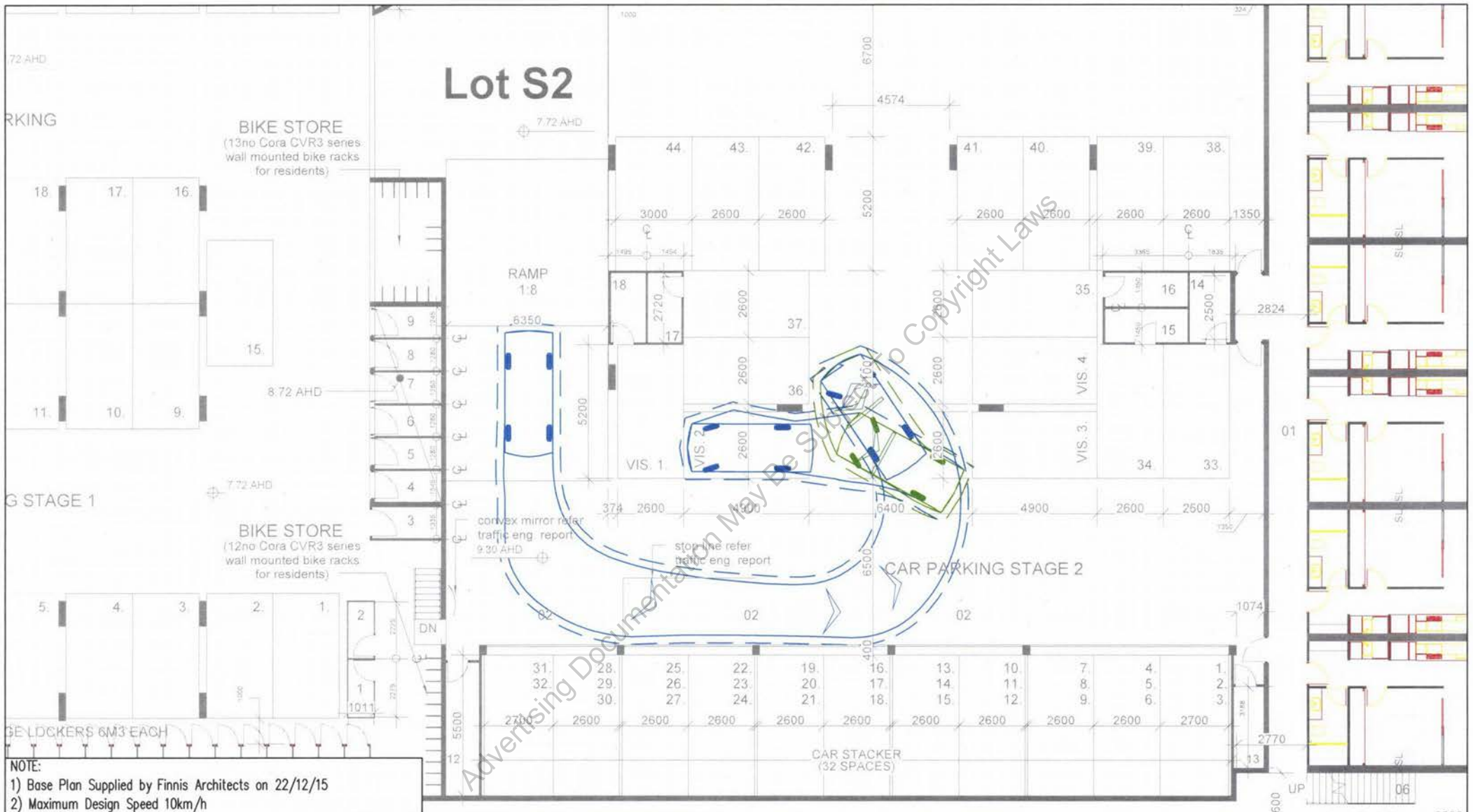
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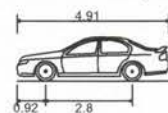




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RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Turn 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment

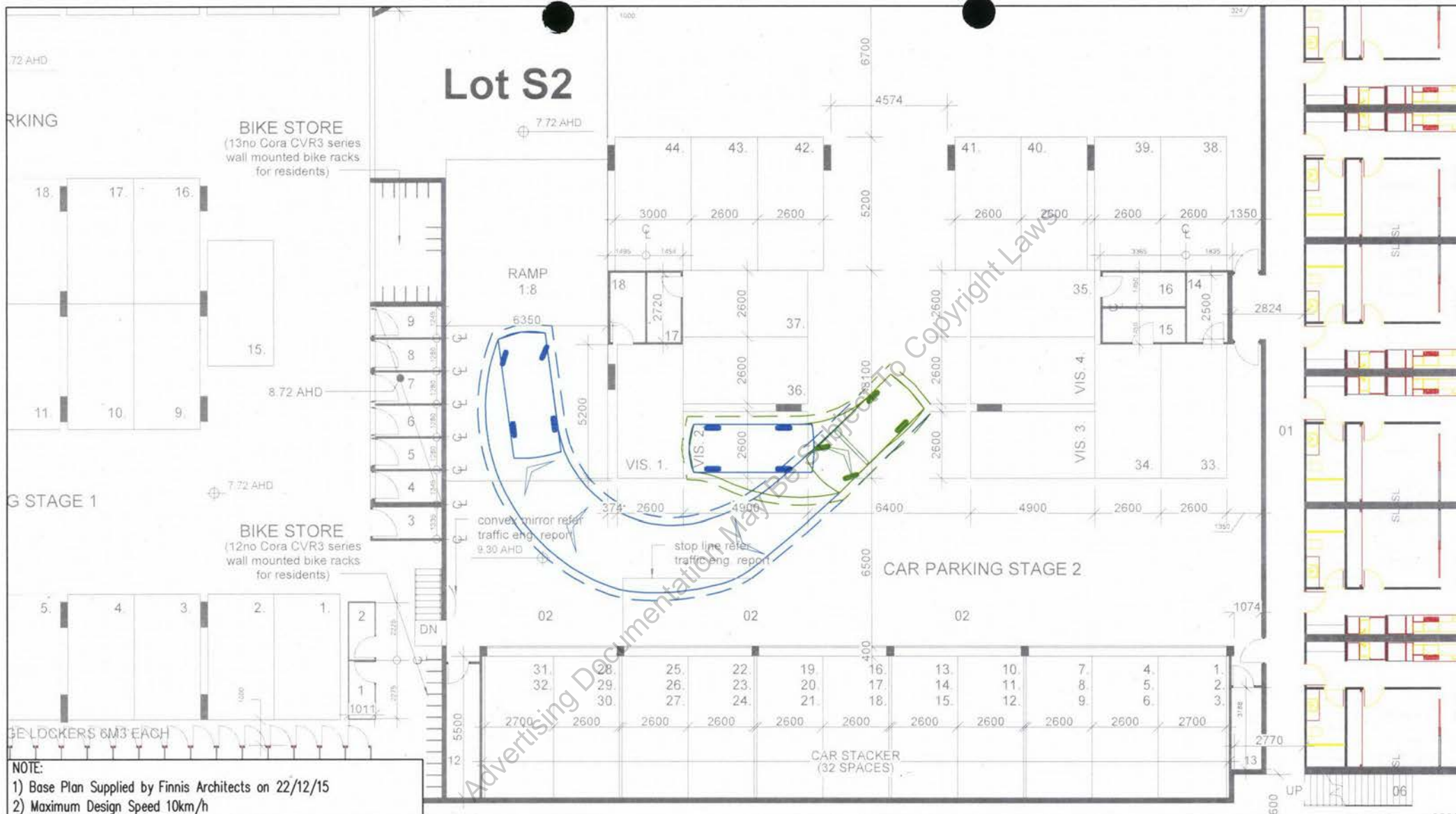


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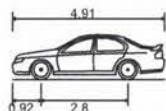
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22/12/2015



# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length  
Overall Width  
Overall Body Height  
Min Body Ground Clearance  
Track Width  
Lock to Lock Time  
Curb to Curb Turning Radius

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



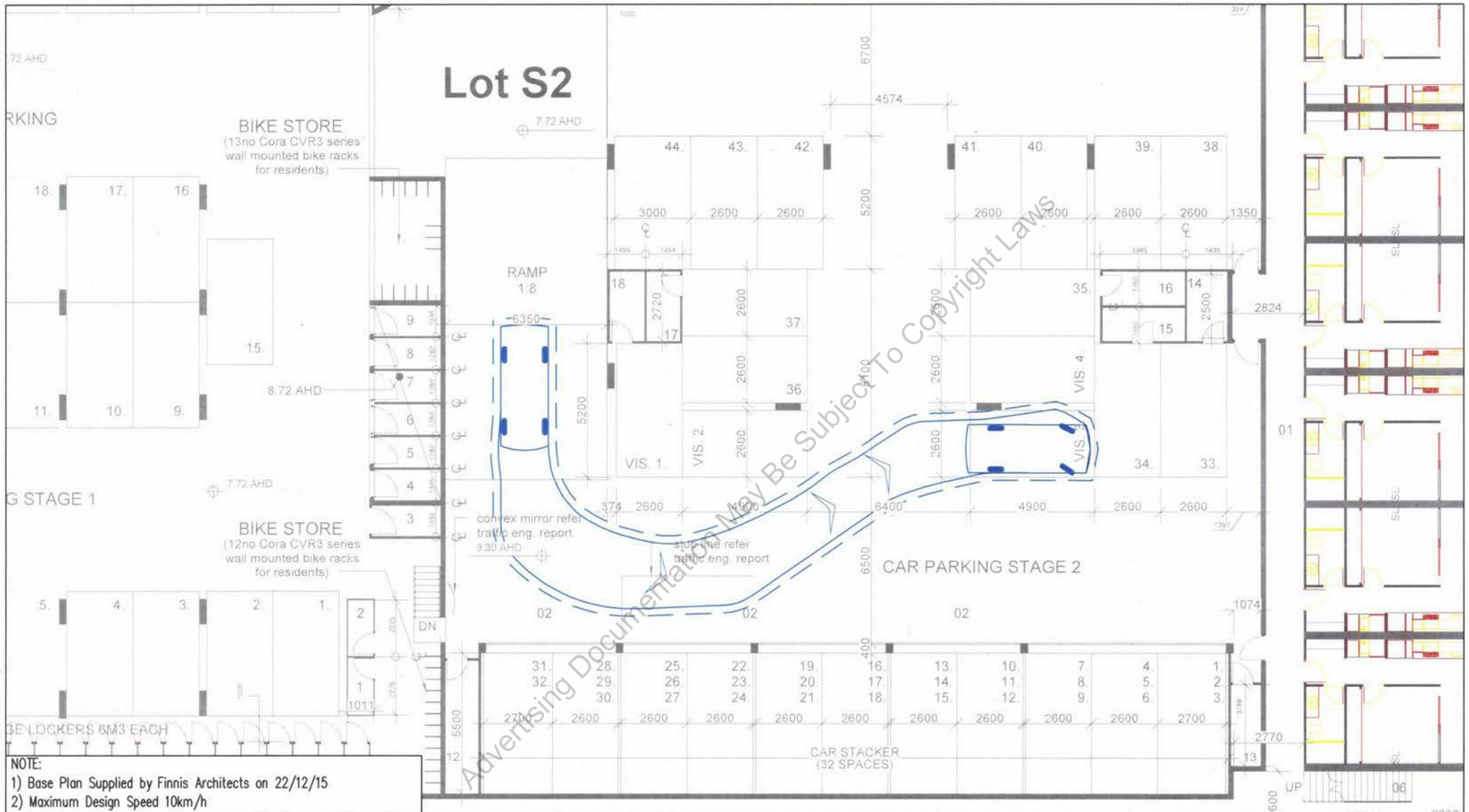
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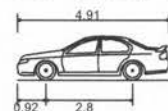
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DATE  
22/12/2015





B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
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Lock to Lock Turning Radius 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



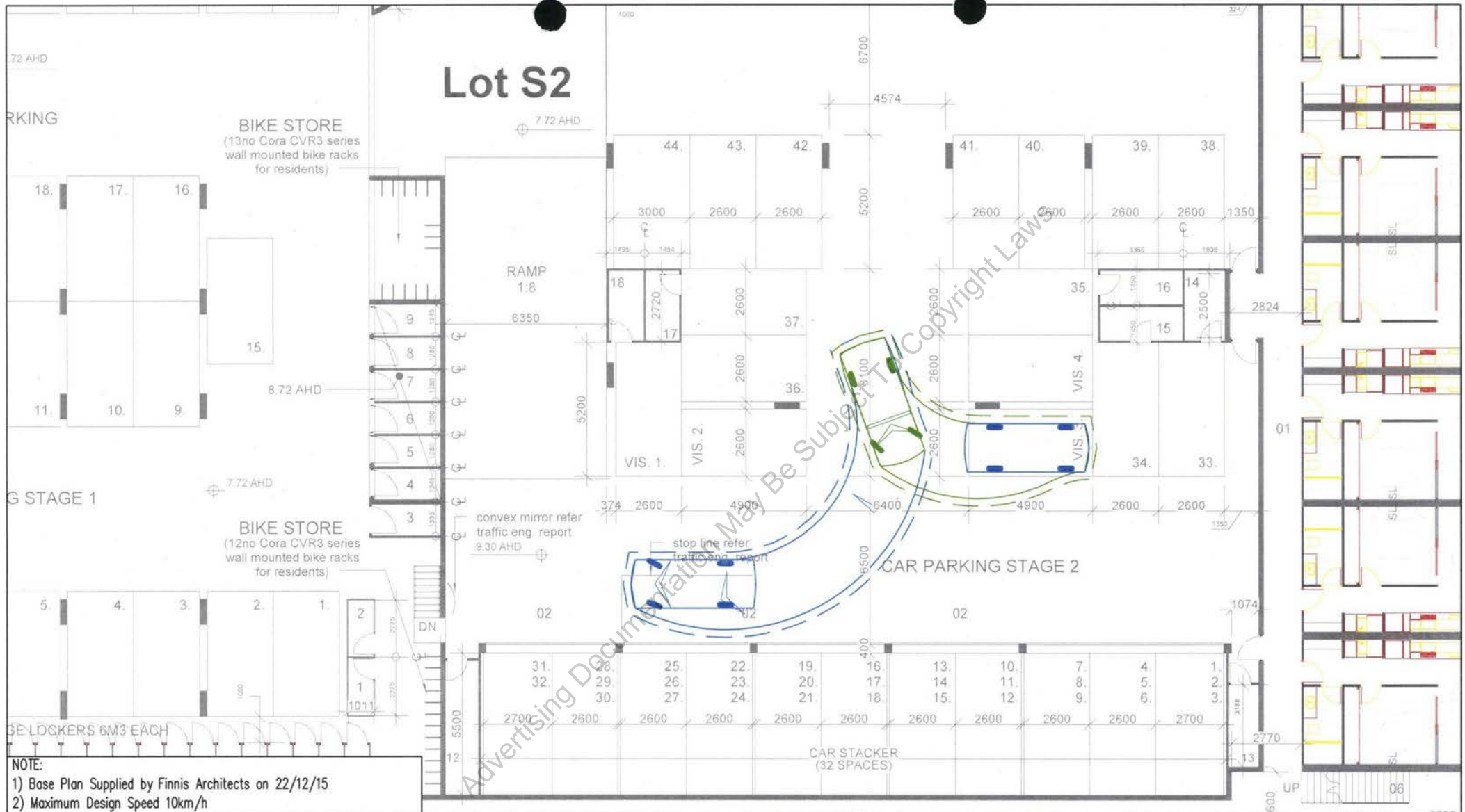
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DATE  
22/12/2015





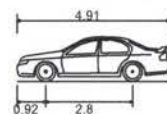
**NOTE:**

- 1) Base Plan Supplied by Finnis Architects on 22/12/15
- 2) Maximum Design Speed 10km/h

**ratio:**

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

**B85 Vehicle (AS/NZS2890.1:2004)**



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
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Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment

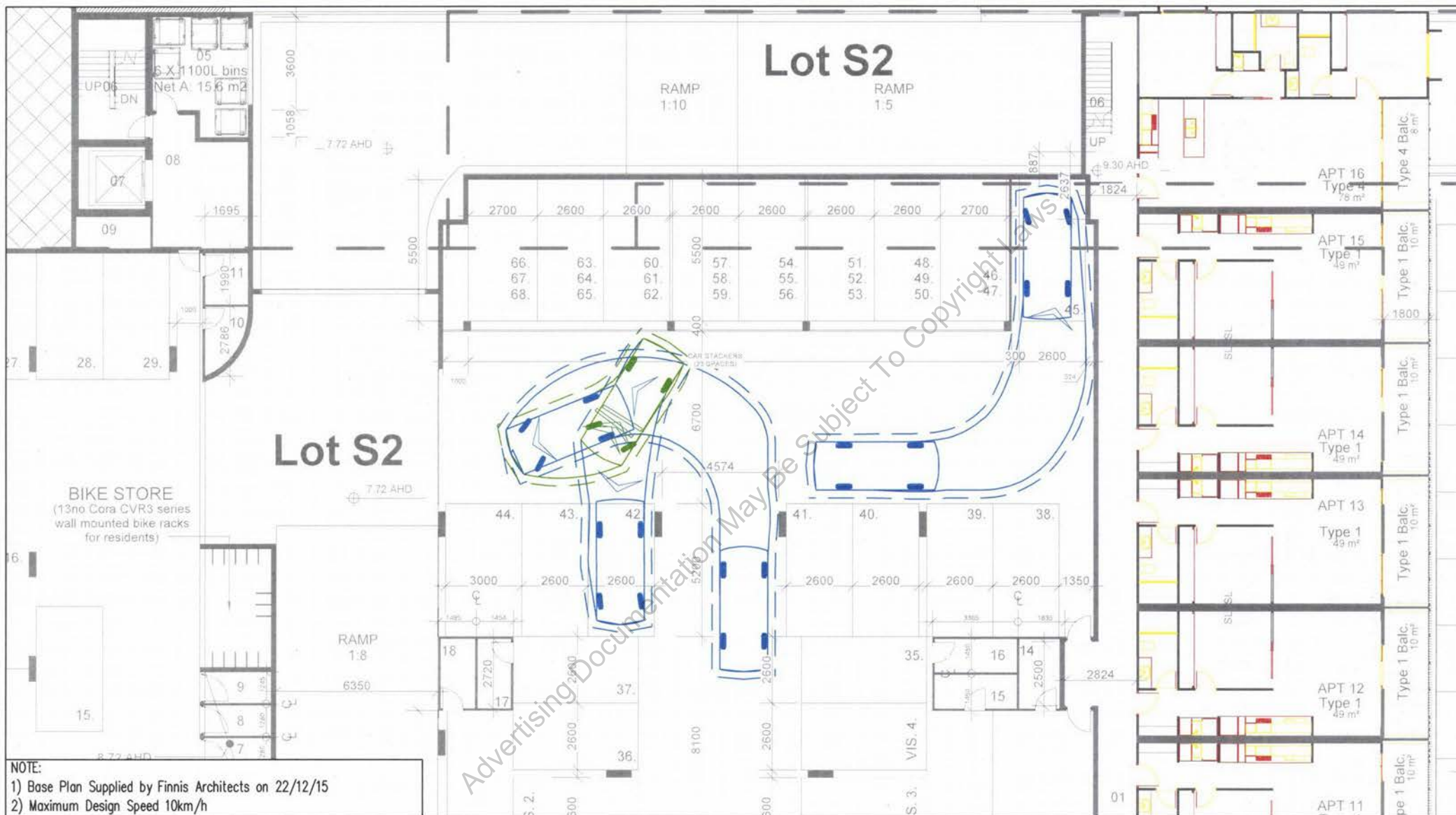


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DATE  
22/12/2015



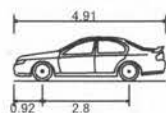
**NOTE:**

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**ratio:**

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

**B85 Vehicle (AS/NZS2890.1:2004)**



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



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11479AT

SHEET No.  
AT (18)

SCALE  
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DATE  
22/12/2015

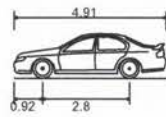




# ratio:

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

B85 Vehicle (AS/NZS2890.1:2004)



Overall Length 4.910m  
Overall Width 1.870m  
Overall Body Height 1.421m  
Min Body Ground Clearance 0.159m  
Track Width 1.770m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 5.750m

VEHICLE ENVELOPE (FORWARD)

300mm CLEARANCE (FORWARD)

VEHICLE ENVELOPE (REVERSE)

300mm CLEARANCE (REVERSE)

Aspendale Gardens  
Residential Development  
Swept Path Assessment



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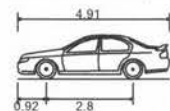
**NOTE:**

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- 2) Maximum Design Speed 10km/h

**ratio:**

RATIO CONSULTANTS PTY LTD  
 ACN 005 422 104  
 9 CLIFTON STREET  
 RICHMOND, VICTORIA 3121  
 TELEPHONE (03) 9429 3111

**B85 Vehicle (AS/NZS2890.1:2004)**



**Overall Length** 4.91m  
**Overall Width** 1.870m  
**Overall Body Height** 1.421m  
**Min Body Ground Clearance** 0.159m  
**Track Width** 1.770m  
**Lock to Lock Tr** 4.00 sec  
**Curb to Curb Turning Radius** 5.750m

Aspendale Gardens  
 Residential Development  
 Swept Path Assessment



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SHEET No.  
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DATE  
 22/12/2015



<b>LEIGH DESIGN</b>	Leigh Design Pty Ltd ABN 37 139 522 437 PO Box 2599 Mt Waverley VIC 3149 P +61 3 8516 5399 M +61 0410 456 510 E <a href="mailto:info@leighdesign.com.au">info@leighdesign.com.au</a> I <a href="http://www.leighdesign.com.au">www.leighdesign.com.au</a>
<i>waste management plans for all urban developments</i>	

**ADVERTISED**

## **WASTE MANAGEMENT PLAN**

**Proposed Development: Stage 2 Apartments  
11-13 Narelle Drive, Aspendale Gardens, Victoria**

**Prepared for:  
BC 39 Pty Ltd**

<b><u>Document Control</u></b>
<b>Report Date:</b> 23 December 2015 (supersedes report dated 12-7-14)
<b>Prepared By:</b> Carlos Leigh, GradIEAust
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## **WASTE MANAGEMENT SUMMARY**

- The operator, as defined below, shall be responsible for managing the waste system and for developing and implementing adequate safe operating procedures.
- Waste shall be stored within the development (hidden from external view).
- Residents shall sort their waste and dispose garbage and recyclables into shared collection bins.
- Waste shall be collected in the development's Level 1 carpark driveway.
- A private contractor shall provide waste collection services.

## **GLOSSARY**

**Operator:** refers to the Owners Corporation, who shall manage site operations (via staff and contractors, if required).

**User:** refers to residents, who shall utilise the waste system.

## **1 SPACE AND SYSTEM FOR WASTE MANAGEMENT**

### **1.1 Development Description and Use**

This development shall consist of the addition of Stage 2 Apartments above the existing Aspendale Gardens Shopping Centre (see Table 1).

#### Notes:

- Stage 2 Apartments shall share a waste system with the approved Stage 1 Apartments.
- The existing shopping centre shall retain its current waste system (this has been excluded from this report).

### **1.2 Estimated Garbage and Recycling Generation**

The following table summarises the waste estimate (m<sup>3</sup>/week):

Table 1: Waste Estimate

<b>Waste Source</b>	<b>Base Qty (est.)</b>	<b>Garbage</b>	<b>Comm. Recycling</b>
Stg1 Apts (1 bed)	No. of units = 6	0.36	0.36
Stg1 Apts (2 bed)	No. of units = 16	1.28	1.28
Stg1 Apts (3 bed)	No. of units = 1	0.12	0.12
Stg2 Apts (1 bed)	No. of units = 28	1.68	1.68
Stg2 Apts (2 bed)	No. of units = 28	2.24	2.24
Stg2 Apts (3 bed)	No. of units = 6	0.72	0.72
<b>TOTAL (m<sup>3</sup>/wk)</b>		<b>6.40</b>	<b>6.40</b>

Note: Waste figures are based on adjusted Sustainability Victoria Guidelines. The above estimate includes the manager's office and a resident's gym.

### **1.3 Collection Services**

As per the approved Stage 1 Apartments, Stage 2 Apartments shall also require private waste collections within the subject land.

The operator shall choose a waste collection provider, negotiate a service agreement, and pay for these services.

### **1.4 Location, Equipment, and System Used for Managing Waste**

The waste management system is summarised as follows:

- Apartment receptacles for garbage and recycling.
- Shared Bin Store for both stages in the Level 1 carpark.
- Collection bins (kept within the Bin Store - refer to Table 2).

The various collection waste-streams are summarised as follows:

Garbage: General waste shall be placed in tied plastic bags and stored within bins.

Recycling: All recyclables shall be commingled into a single type of collection bin (for loose paper, cardboard, PET, glass, aluminum, steel, and HDPE containers).

Green Waste: Based on nil landscaping, minimal garden waste generation is anticipated (however, the operator shall engage a contractor, if required).

Compost: At this development, composting is considered impractical, as there would be minimal onsite demand for compost.

Other Waste Streams: The disposal of hard/electronic/liquid waste, and home detox (paint/chemicals), etc shall be organised with the assistance of the operator.

The following table summarises bin quantity/capacity, collection frequency, and area requirements (based on Table 1):

Table 2: Bin Schedule and Collection Frequency

Waste Source	Waste Stream	Bin Qty	Bin Litres	Collections per Week	Bin Area m <sup>2</sup>
Stage 1 & 2 Apartments (shared private bins)	Garbage	3	660	3	3.6
	Recycling	4	660	3	4.8
	Hard Waste		-	TBA	1.5
<b>Net Bin Storage Area (excludes circulation), m<sup>2</sup>:</b>					<b>9.9</b>

Notes:

- The operator shall organise hard waste collections (as required).
- Private bins shall be sourced by the operator (either purchased from a supplier or leased from the collection contractor).
- Subject to stakeholders' preference/capability (and as built constraints), bin sizes and quantities can be changed. Also, recyclables can be either commingled or split into bins for separate recycling streams.

### **1.5 Planning Drawings, Waste Areas, and Management of the Waste System**

The plans shall illustrate sufficient space for onsite bin storage, as required by the above schedule.

Notwithstanding the above, collection days shall be staged appropriately and the operator shall stipulate procedures for effective management of the available space.



## 1.6 Collection Bin Information

The following bins shall be utilised (see Sect. 4.3 for signage requirements):

Table 3: Bin Details

Capacity (litres)	Height (mm)	Width (across front, mm)	Depth (side on, mm)	Empty Weight (kg)	Average* Gross Weight (kg)
660	1250	1240	780	43	130

Notes:

- \* = Average Gross Weight is based on domestic waste studies (which vary subject to locality and waste-type). Expect greater weight for wet or compacted waste.
- Use the above details as a guide only – variations will occur. The above is based on Sulo plastic (HDPE) bins. Also, steel 660-lit bins could be adopted, STCA.

Table 4: Kingston Colour Coding

Bin	Garbage	Commingled Recycling	Green Waste
Lid	Red	Yellow	Lime
Body	Black	Black	Black

Note: For private bins, AS4123.7 bin colours can be adopted. Private bins shall be labeled to identify the waste generator and site address.

## **2 ACCESS FOR USERS, COLLECTORS, AND COLLECTION VEHICLES**

### **2.1 User Access to Waste Facilities**

Residents shall dispose garbage and recyclables into shared collection bins located within the Bin Store (access via the lift/stairs, if required).

Note: The operator shall have access to the Bin Store to rotate the bins, ensuring that empty bins are available along the circulation area so that users are able to reach them.

### **2.2 Collection Arrangements and Access to Waste Facilities**

- Waste shall be collected in the development's Level 1 carpark driveway (the truck shall prop near the Bin Store).
- The waste collection shall be carried-out by rear-lift vehicles (nom. 6.4m long, 2.1m high, and 6.4 tonnes gross vehicle mass, needing a 2.3m high clearance when collecting 660-lt bins).
- For improved safety, waste collections shall be carried-out during off-peak traffic periods.

### **3 AMENITY, LOCAL ENVIRONMENT, AND FACILITY DESIGN**

#### **3.1 Noise Minimisation Initiatives**

- Collection bins shall feature rubber castors for quiet rolling during transfers.
- Waste areas shall meet BCA and AS2107 acoustic requirements.
- Local laws shall be observed for all operations in public and private areas.
- For private services, the hours of waste collections shall be as specified in council's local laws. Also, Section 5 of the Victorian EPA Noise Control Guideline Publication 1254 (see below) shall be observed to protect the acoustic amenity of the development and surroundings.

Victorian EPA Noise Control Guideline Publication 1254 October 2008 (excerpt)

[Section] 5. Domestic Refuse Collection

The main annoyance produced by domestic refuse collections occurs in the early morning (i.e. before 7:00am). Therefore, if possible, routes should be selected to provide the least impact on residential areas during that time.

Collection of refuse should be restricted to the following criteria:

- Collection occurring once a week should be restricted to the hours: 6am to 6pm Monday to Saturday.
- Collections occurring more than once a week should be restricted to the hours: 7am to 6pm Monday to Saturday.
- Compaction should only be carried out while on the move.
- Bottles should not be broken up at the point of collection.
- Routes which service entirely residential areas should be altered regularly to reduce early morning disturbance.
- Noisy verbal communication between operators should be avoided where possible.

#### **3.2 Litter Reduction and Prevention of Stormwater Pollution**

The operator shall be responsible for:

- Promoting adequate waste disposal into the bins (to avoid waste-dumping).
- Securing the waste areas (whilst affording access to users/staff/contractors).
- Preventing overfilled bins, keeping lids closed and bungs leak-free.
- Abating any site litter and taking action to prevent dumping and/or unauthorised use of waste areas.
- Requiring the collection contractor to clean-up any spillage that might occur when clearing bins.

The above will minimise the dispersion of site litter and prevent stormwater pollution (thus avoiding impact to the local amenity and environment).



### **3.3 Ventilation, Washing, and Vermin-Prevention Arrangements**

Waste areas shall feature:

- Ventilation in accordance with Australian Standard AS1668.
- Impervious flooring (also, smooth, slip-resistant, and appropriately drained).
- A graded bin wash area, hosecock, hose, and a suitable floor-waste connected in accordance with the relevant authority requirements (alternatively, the operator shall engage a suitable contractor to conduct off-site bin washing). The bin and wash areas may overlap, as stored bins can be moved-out so that a bin can be washed.

The operator shall regularly clean waste areas/equipment. Also, access doors and bin-lids shall be kept closed.

### **3.4 Design and Aesthetics of Waste Storage Areas and Equipment**

Waste shall be placed within the bins and stored in designated onsite areas (hidden from external view). Following waste collection activities, bins shall be returned to the storage areas as soon as practicable.

Waste facilities shall be constructed of durable materials and finishes, and maintained to ensure that the aesthetics of the development are not compromised. These facilities and associated passages shall be suitably illuminated (this provides comfort, safety, and security to users, staff, and contractors). Access doors shall feature keyless opening from within.

The design and construction of waste facilities and equipment shall conform to the Building Code of Australia, Australian Standards, and local laws.

## **4 MANAGEMENT AND SUSTAINABILITY**

### **4.1 Waste Sorting, Transfer, and Collection Responsibilities**

Garbage shall be placed within tied plastic bags prior to transferring into the collection bins. Cardboard shall be flattened and recycling containers un-capped, drained, and rinsed prior to disposal into the appropriate bin. Bagged recycling is not permitted.

Refer to Section 2 for waste transfer requirements and collection arrangements.

### **4.2 Facility Management Provisions to Maintain & Improve the Waste System**

It shall be the responsibility of the operator to maintain all waste areas and components, to the satisfaction of users, staff, and the relevant authority (residents shall maintain their internal waste receptacles).

The operator shall ensure that maintenance and upgrades are carried-out on the facility and components of the waste system. When required, the operator shall engage an appropriate contractor to conduct services, replacements, or upgrades.

### **4.3 Arrangements for Protecting Waste Equipment from Theft and Vandalism**

It shall be the responsibility of the operator to protect the equipment from theft and vandalism. This shall include the following initiatives:

- Secure the waste areas.
- Label the bins according to property address.
- Waste bins shall be collected in the development's Level 1 carpark driveway (bins shall remain within the development at all times).

### **4.4 Arrangements for Bins/Equipment Labelling and Ensuring Users and Staff are Aware of How to Use the Waste System Correctly**

- The operator shall provide appropriate signage for the bins. Signage is available at the following internet address: [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).
- The operator shall publish/distribute "house rules" and educational material to:
  - Inform users/staff about the waste management system and the use/location of the associated equipment (provide the summary in page 2 of this report).
  - Improve facility management results (lessen equipment damage, reduce littering, and achieve cleanliness).
  - Advise users/staff to sort and recycle waste with care to reduce contamination of recyclables.

#### **4.5 Sustainability and Waste Avoidance/Reuse/Reduction Initiatives**

The *Environment Protection Act 1970* includes principles of environment protection and guidance for waste management decision making. Also, the *Sustainability Victoria Act 2005* established Sustainability Victoria as the statutory authority for delivering programs on integrated waste management and resource efficiency.

From a design perspective, the development shall support the acts by providing an adequate waste system with ability to sort waste.

The operator shall promote the observance of the acts (where relevant and practicable) and encourage users and staff to participate in minimising the impact of waste on the environment. For improved sustainability, the operator shall consider the following:

- Observe the waste hierarchy in the *Environment Protection Act 1970* (in order of preference): a) waste avoidance, b) reuse, c) recycle, d) recovery of energy, e) treatment, f) containment, and g) disposal.
- Peruse the Sustainability Victoria website: [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).
- Participate in Council and in-house programs for waste minimisation.
- Establish waste reduction and recycling targets; including periodic waste audits, keeping records, and monitoring of the quantity of recyclables found in landfill-bound bins (sharing results with users/staff).

#### **4.6 Waste Management Plan Revisions**

For any future appropriate council request, changes in legal requirements, changes in the development's needs and/or waste patterns (waste composition, volume, or distribution), or to address unforeseen operational issues, the operator shall be responsible for coordinating the necessary Waste Management Plan revisions, including (if required):

- A waste audit and new waste strategy.
- Revision of the waste system (bin size/quantity/streams/collection frequency).
- Re-education of users/staff.
- Revision of the services provided by the waste collector(s).
- Any necessary statutory approval(s).



## 5 SUPPLEMENTARY INFORMATION

- The operator shall ensure that bins are not overfilled or overloaded.
- Waste incineration devices are not permitted, and offsite waste treatment and disposal shall be carried-out in accordance with regulatory requirements.
- For bin traffic areas, either level surfaces (smooth and without steps) or gentle ramps are recommended, including a roll-over kerb or ramp. Should ramp gradients, bin weight, and/or distance affect the ease/safety of bin transfers, the operator shall consider the use of a suitable tug.
- The operator and waste collector shall observe all relevant OH&S legislation, regulations, and guidelines. The relevant entity shall define their tasks and:
  - Comply with Worksafe Victoria's Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-hazardous Waste and Recyclable Materials (June 2003).
  - Assess the Manual Handling Risk and prepare a Manual Handling Control Plan for waste and bin transfers (as per regulatory requirements and Victorian COP for Manual Handling).
  - Obtain and provide to their staff/contractors equipment manuals, training, health and safety procedures, risk assessments, and adequate personal protective equipment (PPE) to control/minimise risks/hazards associated with all waste management activities. As a starting point, these documents and procedures shall address the following:

Task (to be confirmed)	Hazard (TBC)	Control Measures (TBC)
Sorting waste and cleaning the waste system	Bodily puncture. Biological & electrical hazards	Personal protective equipment (PPE). Develop a waste-sorting procedure
Bin manual handling	Sprain, strain, crush	PPE. Maintain bin wheel-hubs. Limit bin weight. Provide mechanical assistance to transfer bins
Bin transfers and emptying into truck	Vehicular strike, run-over	PPE. Develop a Hazard Control Plan for transfers and collections. Maintain visibility. Use a mechanical bin-tipper
Truck access (reversing & manoeuvring)	Vehicular incident, strike, run-over	PPE. Use a trained spotter. Develop a truck-manoeuving and traffic-control procedure

Note: The above shall be confirmed by a qualified OH&S professional who shall also prepare site-specific assessments, procedures, and controls (refer to Section 6).

## **6 CONTACT INFORMATION**

**City of Kingston** (local council), ph 1300 653 356

**Waste Wise Environmental** (private waste collector), ph 03 9359 1555

**Kartaway** (private waste collector), ph 1300 362 362

**Eco-Safe Technologies** (odour control equipment supplier), ph 03 9706 4149

**Solution for Workplace Health and Safety** (OH&S consultant), ph 0425 802 669

**Warequip** (tug supplier – for bin transfers), ph 1800 337 711

**Sulo MGB Australia** (bin supplier), ph 03 9357 7320

**One Stop Garbage Shop** (bin supplier), ph 03 9338 1411

Note: The above includes a complimentary listing of contractors and equipment suppliers. The stakeholders shall not be obligated to procure goods/services from these companies. Leigh Design does not warrant (or make representations for) the goods/services provided by these suppliers.

## **7 LIMITATIONS**

The purpose of this report is to document a Waste Management Plan, as part of a Planning Permit Application.

This report is based on the following conditions:

- Operational use of the development (excludes demolition/construction stages).
- Drawings and information supplied by the project architect.
- The figures presented in this report are estimates only. The actual amount of waste will depend on the development's occupancy rate and waste generation intensity, the user's disposition toward waste and recycling, and the operator's approach to waste management. The operator shall make adjustments, as required, based on actual waste volumes (if the actual waste volume is greater than estimated, then the number of bins and/or the number of collections per week shall be increased).
- This report shall not be used to determine/forecast operational costs, or to prepare feasibility studies, or to document operational/safety procedures.

Dear Luke,

23 March 2016

Luke Dowdle  
Nepean Planning Consultants  
Via email:  
[luke@nepeanplanning.com.au](mailto:luke@nepeanplanning.com.au)

**Traffic Response to Request for Further Information  
KP-519/2012/A**

11-13 Narelle Drive, Aspendale Gardens

In response to the concerns raised in the RFI dated 1 February 2016, amended plans have been prepared. This letter summarises the changes as they relate to the traffic related issues and responses given where changes have not occurred.

7

- a. Ramp dimensions now added
- b. Headroom now indicated on elevations, confirming 2.1m clearance to all 5 spaces.
- c. Plan now shows that 2.2m min clearance achieved along with longitudinal cross section.
- d. Convex mirror now shown opposite bottom of ramp in accordance with the arrangement previously approved at VCAT. This will assist with visibility between vehicles exiting the ramp and vehicles departing along the laneway.
- e. Intercom now shown.
- f. The custom waste collection vehicle can negotiate the ramp without scraping (see attached).
- g. Note added to plans requiring bike spaces to comply with Australian Standard.
- h. Only 2.2m of headroom is required for the small waste truck that will be accessing the waste collection vehicle.

In response to the traffic referral comments, additional changes have been made.

- Column locations beneath access ramp adjusted to comply with door opening requirements.



- Wheel stops installed where appropriate
- Mirrors considered to be an appropriate measure of improving visibility for pedestrians using the zebra crossing. Not shown on plan but considered to be an appropriate condition.

The changes to the plans are considered to have addressed the traffic related concerns raised by Council.

Should you have any further queries feel free to contact the undersigned on 9429 3111.

Yours Sincerely

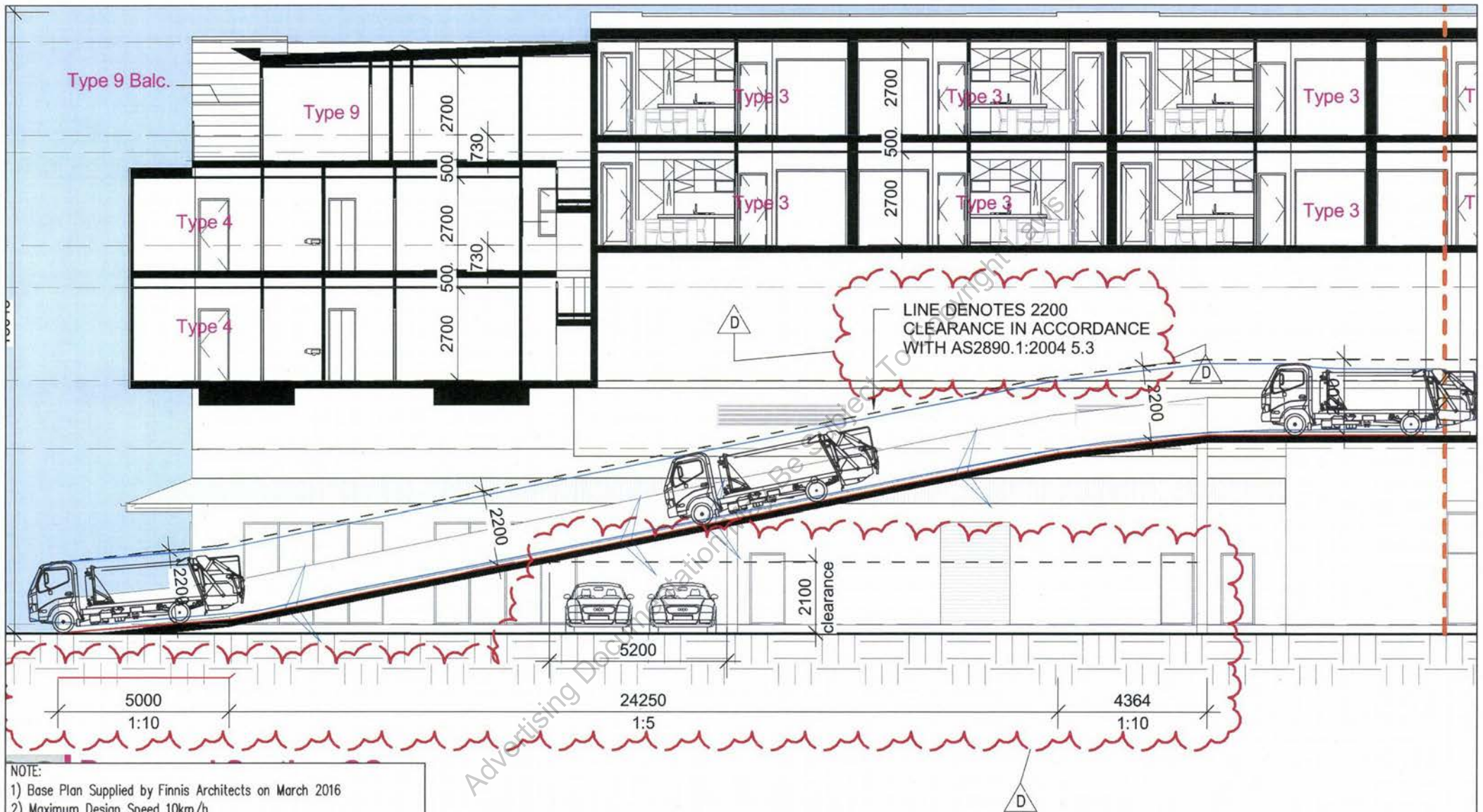


Brett Young

**Director - Traffic  
Ratio Consultants**







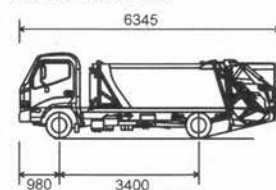
**NOTE:**

- 1) Base Plan Supplied by Finnis Architects on March 2016
- 2) Maximum Design Speed 10km/h

**ratio:**

RATIO CONSULTANTS PTY LTD  
ACN 005 422 104  
9 CLIFTON STREET  
RICHMOND, VICTORIA 3121  
TELEPHONE (03) 9429 3111

Waste Wise Truck



VEHICLE ENVELOPE (FORWARD)  
300mm CLEARANCE (FORWARD)  
VEHICLE ENVELOPE (REVERSE)  
300mm CLEARANCE (REVERSE)

Overall Length 6.345m  
Overall Width 1.770m  
Overall Body Height 2.080m  
Min Body Ground Clearance 0.205m  
Track Width 1.570m  
Lock to Lock Time 4.00 sec  
Curb to Curb Turning Radius 7.100m

Aspendale Gardens

Ground Clearance Check – DOWN



OUR REF  
Drawing1/

SHEET No.  
AT02

SCALE  
1:150@A4

DATE  
23/03/2016



## SITE CONTEXT



1. Aspendale Gardens Community Centre
2. L L Stevenson Reserve
3. Aspendale Gardens Primary School
4. Rosedale Golf Club
5. Edithvale - Seaford Wetlands Environmental Area

## SITE PLAN



1. Aspendale Gardens Community Centre
2. L L Stevenson Reserve
3. Aspendale Gardens Primary School

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## SHEET LIST

Sheet #	Sheet Name	Current Revision
TP0.0	COVER PAGE	
TP0.1	SITE PHOTO RECORD	
TP1.0	EXISTING PLANS	
TP1.1	EXISTING PLANS	
TP1.2	EXISTING PLANS	
TP1.3	EXISTING PLANS	
TP2.0	EXISTING SECTIONS / ELEVATION	A
TP3.0	DESIGN RESPONSE	A
TP3.1	TYPICAL APARTMENT LAYOUTS	
TP3.2	TYPICAL APARTMENT LAYOUTS	
TP4.0	PROPOSED PLANS	A
TP4.1	PROPOSED PLANS	C
TP4.2	PROPOSED PLANS	A
TP4.3	PROPOSED PLANS	A
TP4.4	PROPOSED ROOF PLAN	A
TP6.0	PROPOSED SECTIONS	A
TP6.1	PROPOSED SECTIONS	A
TP6.2	PROPOSED SECTIONS	A
TP6.3	CROSS VENTILATION DIAGRAMS	
TP7.0	PROPOSED ELEVATIONS	A
TP8.0	EXISTING OVERSHADOWING DIAGRAMS	
TP8.1	PROPOSED OVERSHADOWING DIAGRAMS	
TP9.0	PROPOSED STORAGE FACILITIES	



STAGE 1 TP RENDERING

COVER PAGE  
TP0.0  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev

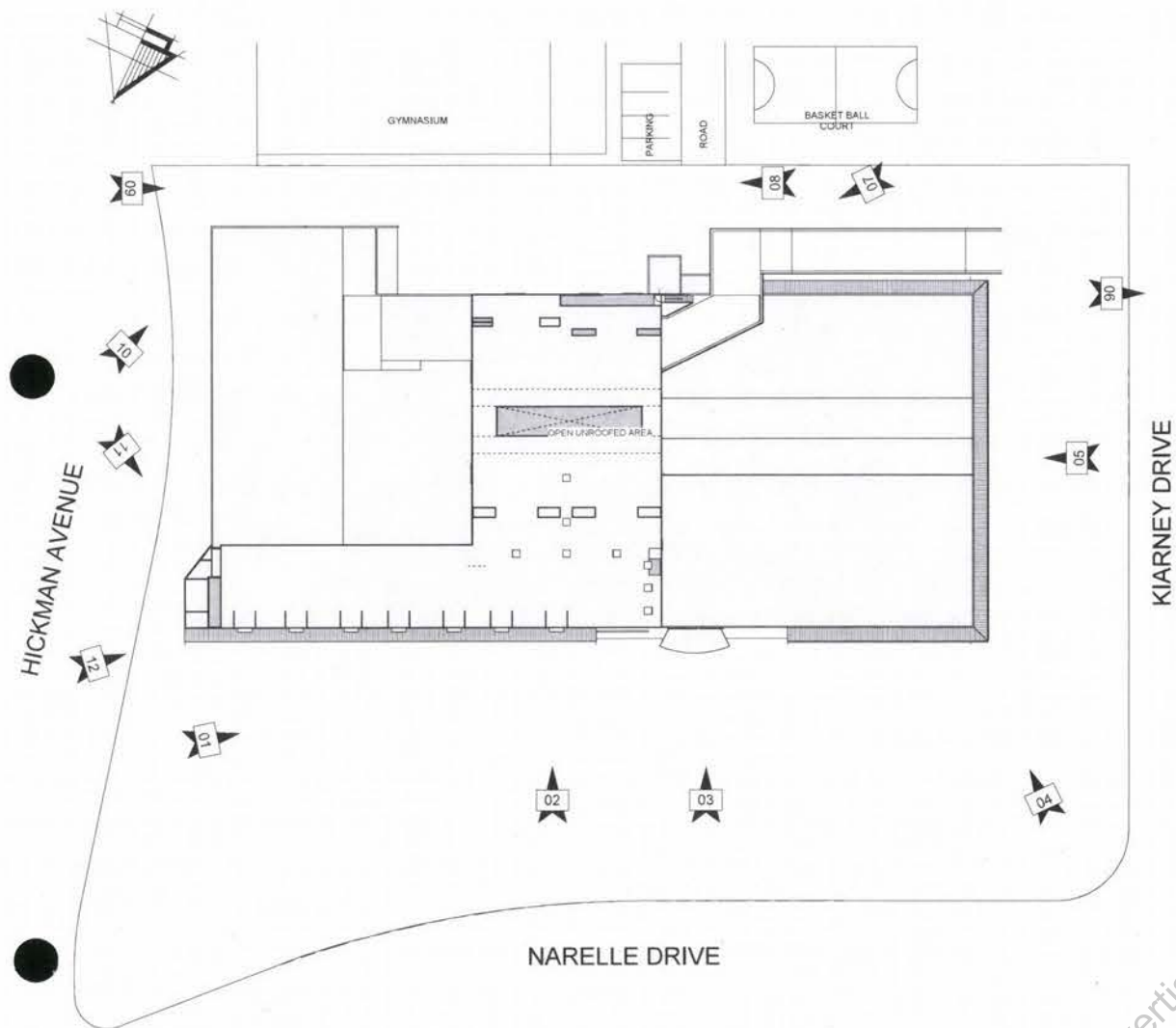


**Finnis  
Architects**

72 Bridport Street, Albert Park 3206  
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## PHOTO RECORD

Photo Record Plan  
1-500-

01 VIEW FROM CARPARK LOOKING FROM NORTH-WEST  
02 VIEW FROM CARPARK LOOKING AT NARELLE DRIVE'S ENTRY  
03 NARELLE DRIVE STORE ENTRY  
04 EXISTING SHOPS LOOKING FROM SOUTH-WEST  
05 EXISTING SHOPS LOOKING FROM EAST  
06 VIEW FROM SOUTH-EAST LOOKING AT ASPENDEL GARDENS PRIMARY SCHOOL

07 NORTH-EAST CARPARK  
08 PLAYGROUND  
09 NORTH-EAST VIEW FROM HICKMAN AVENUE  
10 VIEW FROM HICKMAN AVENUE LOOKING AT NORTH-EAST  
11 HICKMAN AVENUE  
12 EXISTING SHOPS LOOKING FROM NORTH-WEST

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SITE PHOTO RECORD  
TP0.1  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date	
rev	



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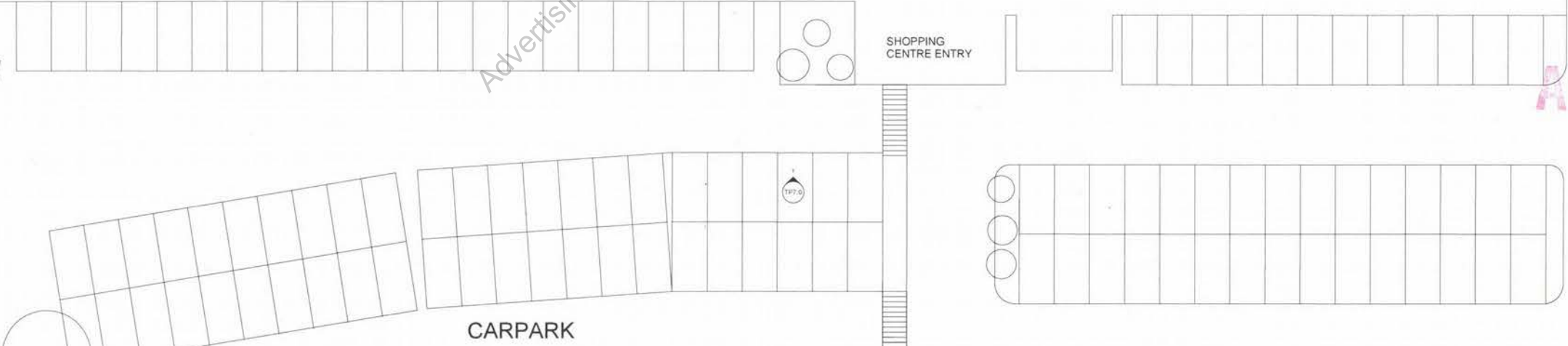
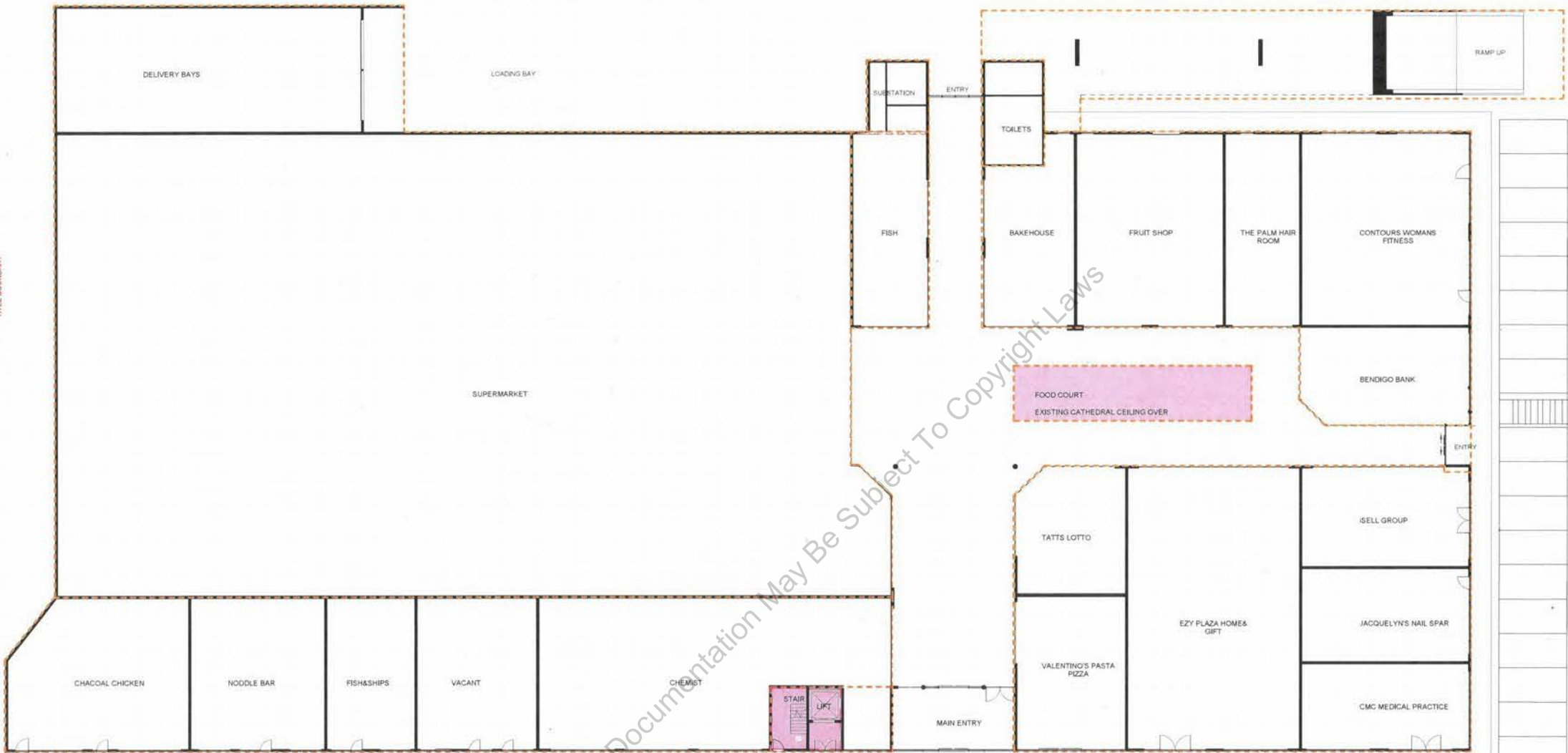


EXISTING PLANS

- LEGEND
- Denotes Existing Commercial / Retail
  - Denotes Common Area
  - Denotes Common services
  - Denotes Car Park Lot
  - Denotes Residential Apartments
  - Dashed orange lines represent indicative title lot boundaries. To be verified with survey

HICKMAN AVENUE

KEARNEY DRIVE



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01 EXISTING FLOOR - LEVEL 0

ENTRY-EXIT  
6.0 M. WIDE

NARELLE DRIVE

EXISTING PLANS  
TP1.0  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev



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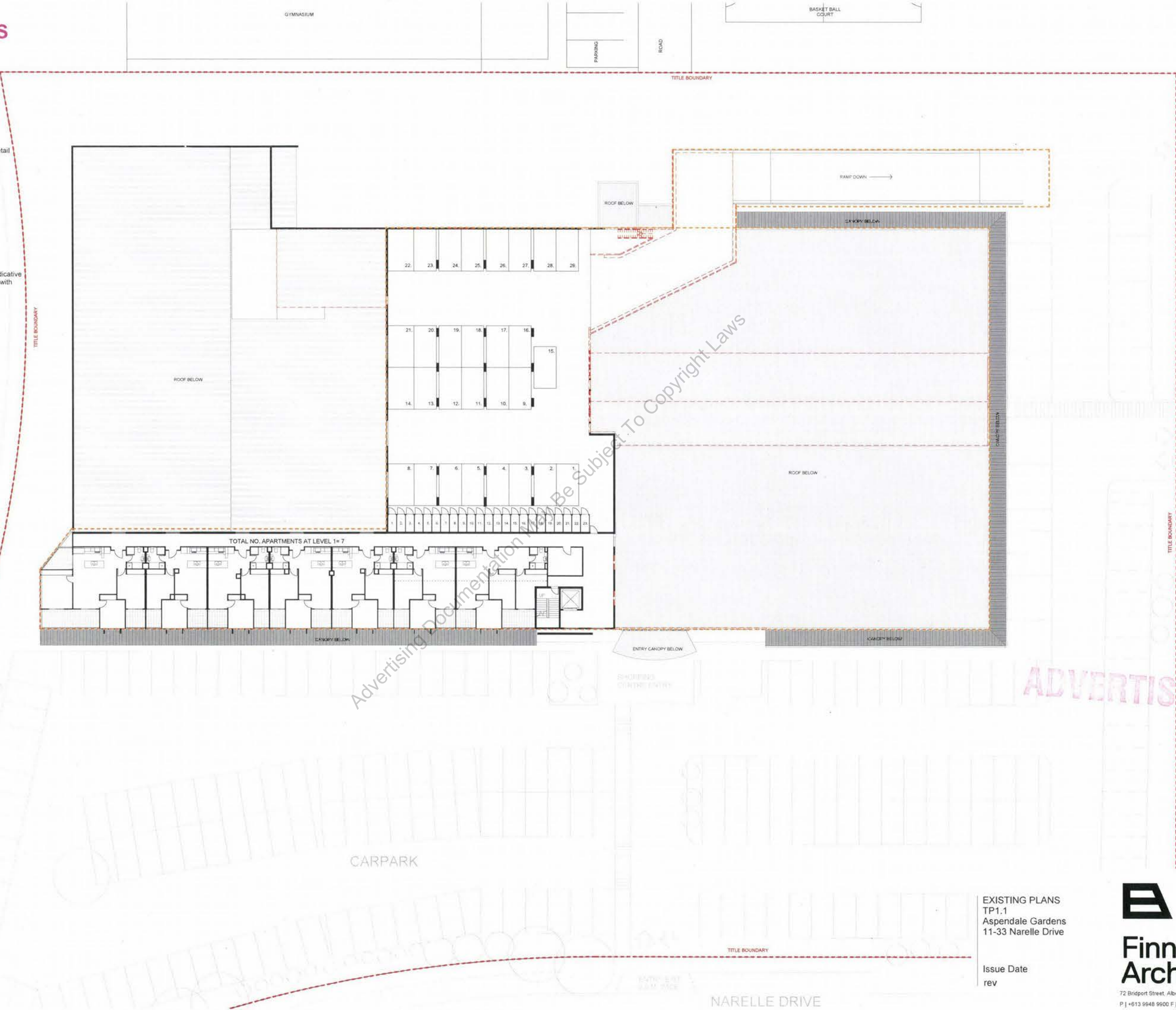
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EXISTING PLANS

LEGEND

- Denotes Existing Commercial / Retail
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EXISTING PLANS

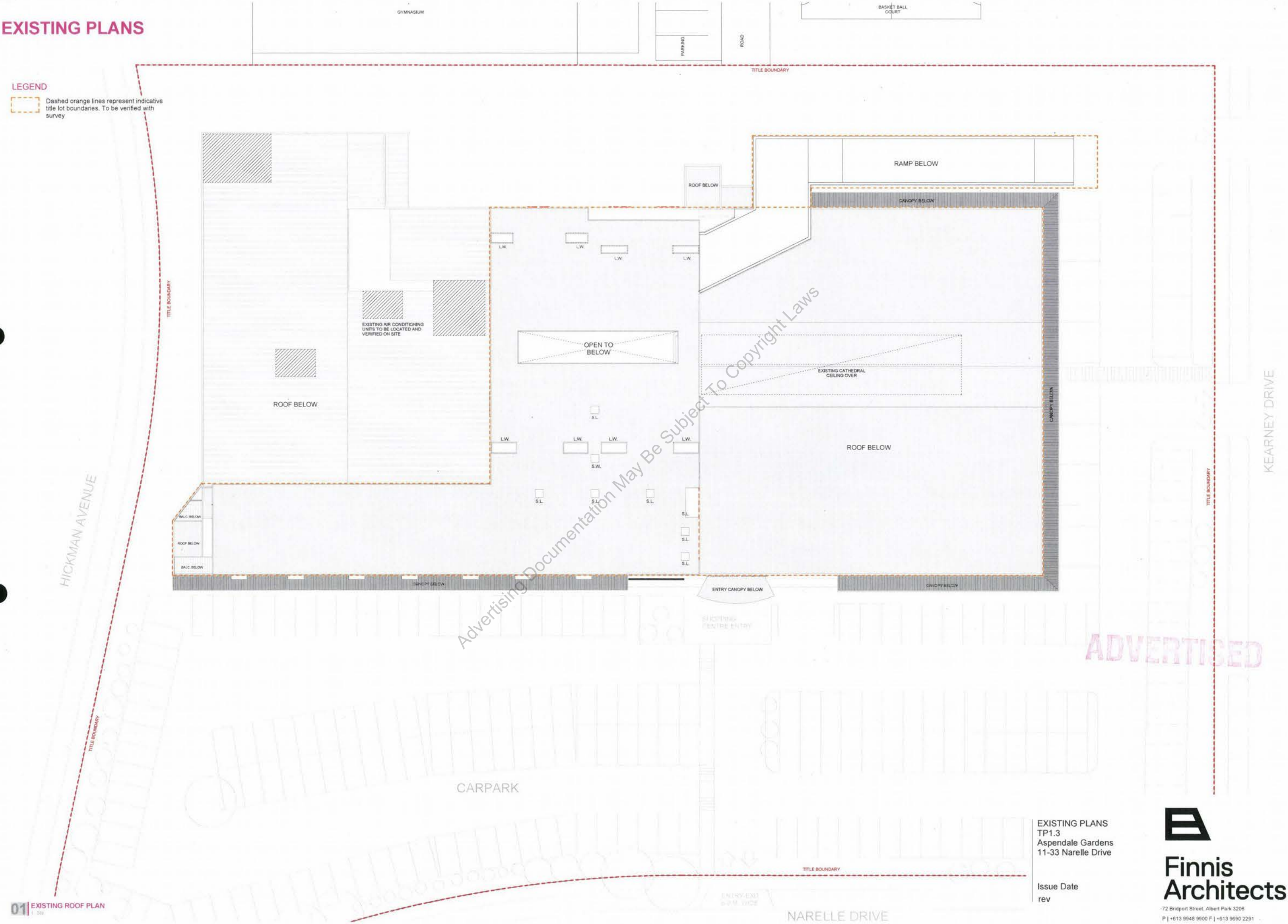
- LEGEND
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EXISTING PLANS

LEGEND  
Dashed orange lines represent indicative title lot boundaries. To be verified with survey

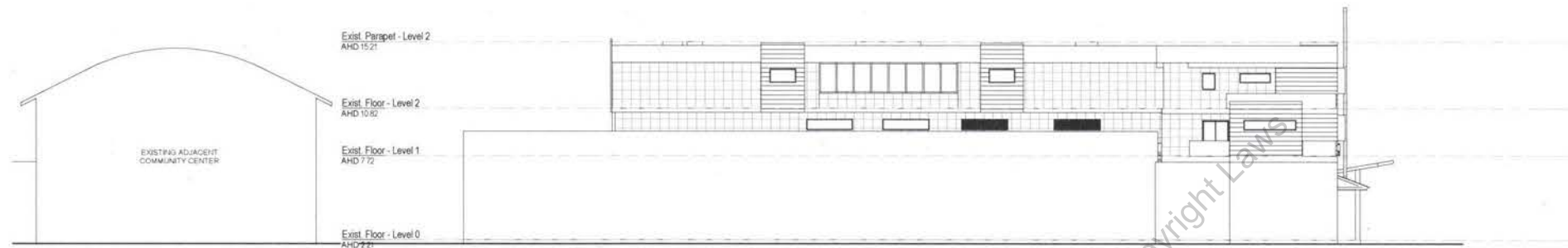




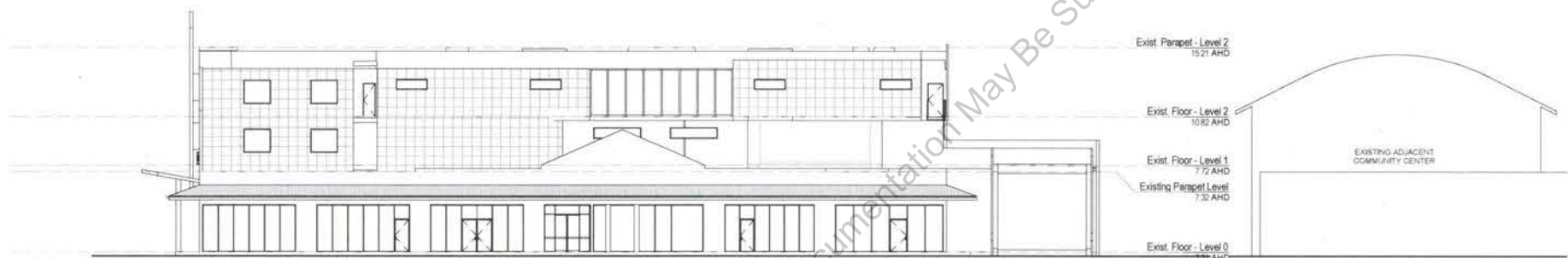
# EXISTING SECTIONS / ELEVATIONS



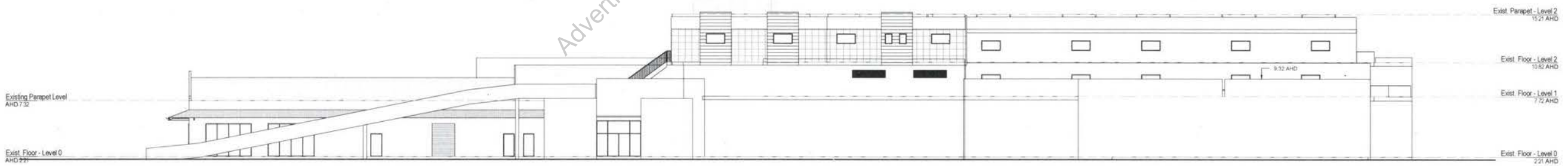
01 EXISTING NORTH WEST ELEVATION



02 EXISTING NORTH EAST ELEVATION



03 EXISTING SOUTH WEST ELEVATION



04 EXISTING SOUTH EAST ELEVATION



05 CROSS SECTION

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24-11-2015

EXISTING SECTIONS /  
ELEVATION  
TP2.0  
Aspendale Gardens  
11-33 Narelle Drive  
  
Issue Date  
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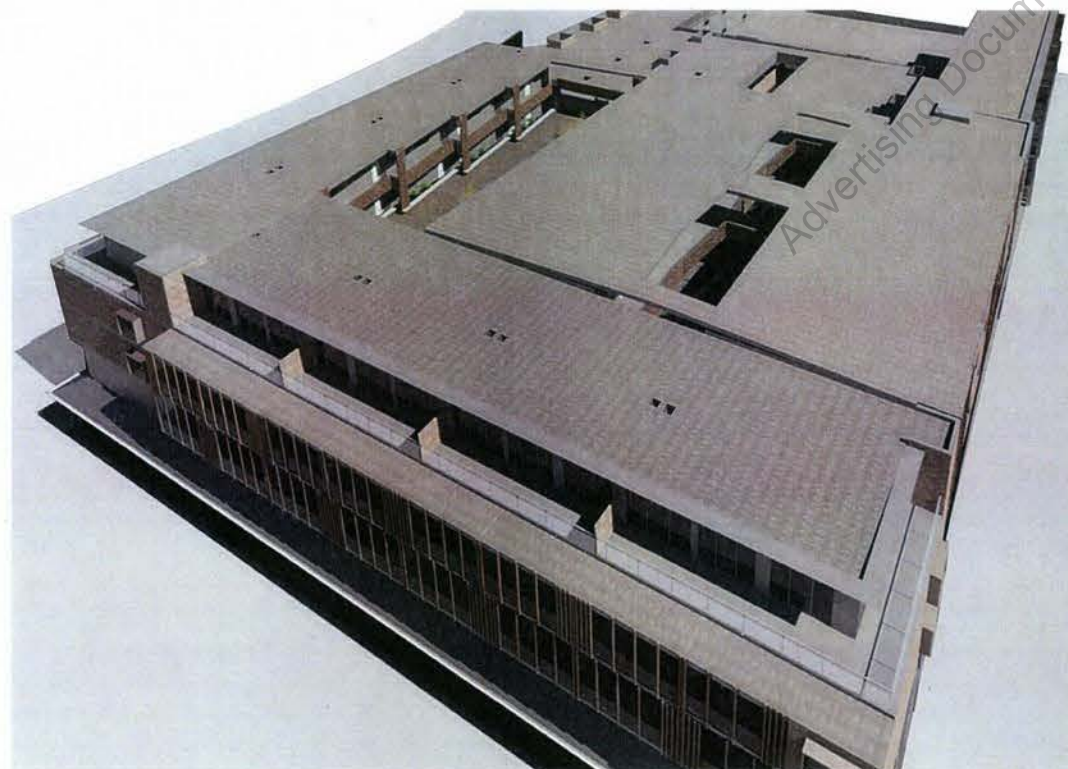
# DESIGN RESPONSE



PERSPECTIVE VIEW LOOKING FROM SOUTH-WEST



PERSPECTIVE VIEW LOOKING FROM SOUTH-EAST



BIRD'S EYE VIEW



INTERIOR VIEW OF THE COURTYARD

- A Timber weatherboard cladding colour
- B Vertical Timber Slat
- C Frameless glass balustrade with satin chrome supports
- D Black return air grill
- E Timber Decking
- F Finish wall colour (Dark grey)
- G Composite Alucobond save



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DESIGN RESPONSE  
TP3.0  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev A

24-11-2015

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**01** APARTMENT TYPE 1\_1 BED  
1:50



**02** APARTMENT TYPE 2\_1 BED  
1:50



**03** APARTMENT TYPE 3\_2 BED WITH ENSUITE  
1:50



**04** APARTMENT TYPE 4\_2 BED WITH ENSUITE  
1:50



**05** APARTMENT TYPE 5\_2 BED WITH TERRACE  
1:50



**06** APARTMENT TYPE 6\_2 BED WITH TERRACE  
1:50



**07** APARTMENT TYPE 7\_3 BED ALL BEDROOMS TO EXTERIOR  
1:50

#### AREA SCHEDULE (Apartments)

Name	Area
Type 1	49 m <sup>2</sup>
Type 1 Balc.	10 m <sup>2</sup>
Type 2	49 m <sup>2</sup>
Type 2 Balc.	10 m <sup>2</sup>
Type 3	91 m <sup>2</sup>
Type 3 Balc.	8 m <sup>2</sup>
Type 4	78 m <sup>2</sup>
Type 4 Balc.	8 m <sup>2</sup>
Type 5	78 m <sup>2</sup>
Type 5 Balc.	21 m <sup>2</sup>
Type 6	78 m <sup>2</sup>
Type 6 Balc.	21 m <sup>2</sup>
Type 7	87 m <sup>2</sup>
Type 7 Balc.	23 m <sup>2</sup>
Type 9	82 m <sup>2</sup>
Type 9 Balc.	42 m <sup>2</sup>

ADVERTISED

TYPICAL APARTMENT  
LAYOUTS  
TP3.1  
Aspendale Gardens  
11-33 Narelle Drive  
  
Issue Date  
rev

**Finnis  
Architects**  
72 Bridport Street, Albert Park 3206  
P | +613 9948 9900 F | +613 9690 2291





01 APARTMENT TYPE 8\_3 BED  
1:50



02 APARTMENT TYPE 9\_2 BED  
1:50

AREA SCHEDULE (Apartments)	
Name	Area
Type 1	49 m²
14	
Type 1 Balc.	10 m²
14	
Type 2	49 m²
14	
Type 2 Balc.	10 m²
14	
Type 3	91 m²
16	
Type 3 Balc.	8 m²
16	
Type 4	78 m²
4	
Type 4 Balc.	9 m²
4	
Type 5	78 m²
3	
Type 5 Balc.	21 m²
3	
Type 6	78 m²
3	
Type 6 Balc.	21 m²
3	
Type 7	87 m²
6	
Type 7 Balc.	23 m²
6	
Type 8	92 m²
2	
Type 8 Balc.	42 m²
2	

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TYPICAL APARTMENT  
LAYOUTS  
TP3.2  
Aspendale Gardens  
11-33 Narelle Drive  
  
Issue Date  
rev

**Finnis Architects**  
72 Bridport Street, Albert Park 3206  
P | +613 9948 9600 F | +613 9690 2291

PROPOSED PLANS

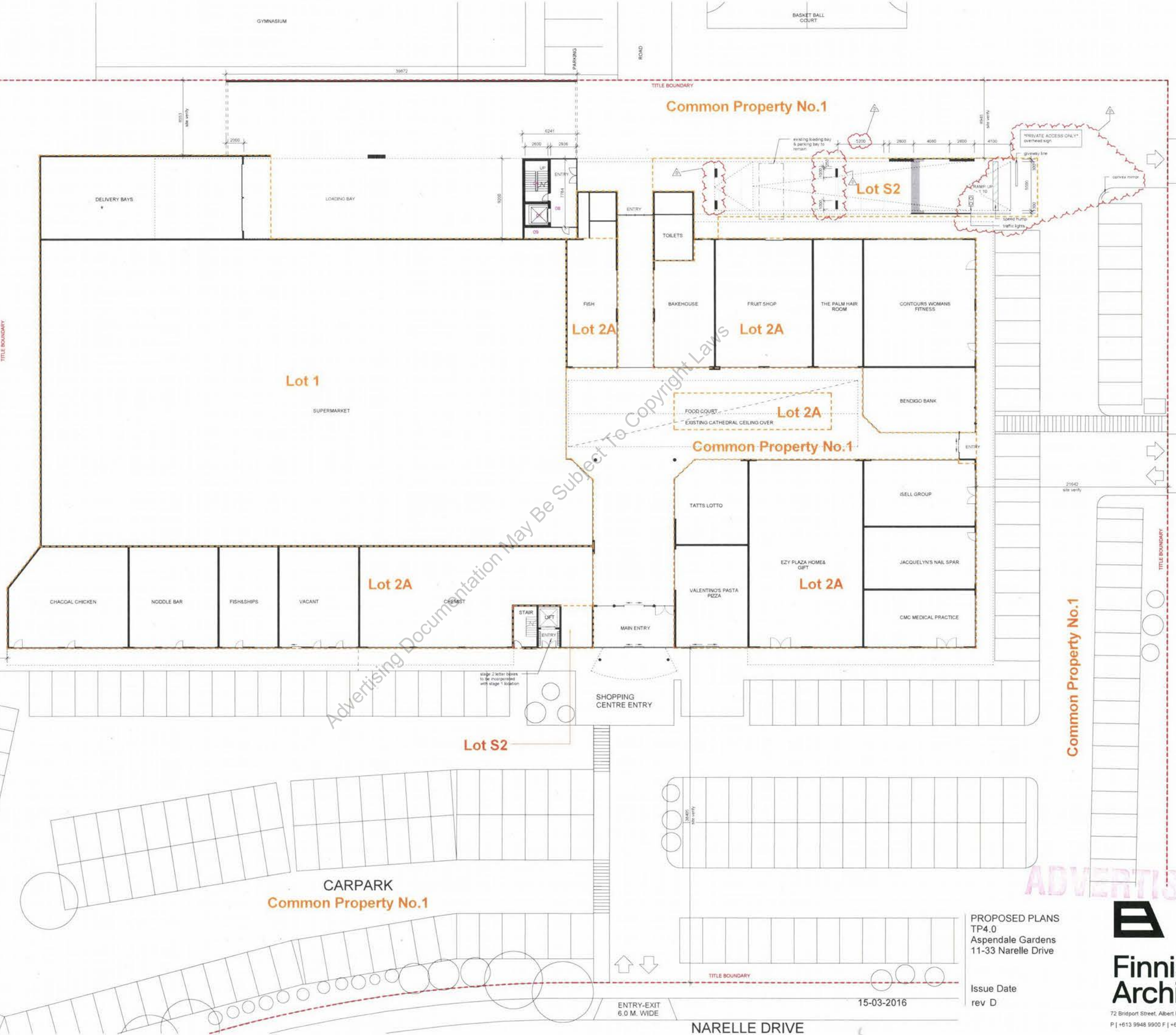
- Plan Key
- 01 Passage
  - 02 Skylight
  - 03 Planter
  - 04 Bike storage
  - 05 Refuse Room
  - 06 Stair access
  - 07 LR access
  - 08 Lobby
  - 09 Services
  - 10 Internal Courtyard
  - 11 Bench Seating
  - 12 Ramp access
  - 13 Courtyard void
  - 14 Roof below

LEGEND

Dashed orange lines represent indicative title lot boundaries. To be verified with survey

HICKMAN AVENUE

KEARNEY DRIVE



ADVERTISED



PROPOSED PLANS

AREA SCHEDULE (Apartments)

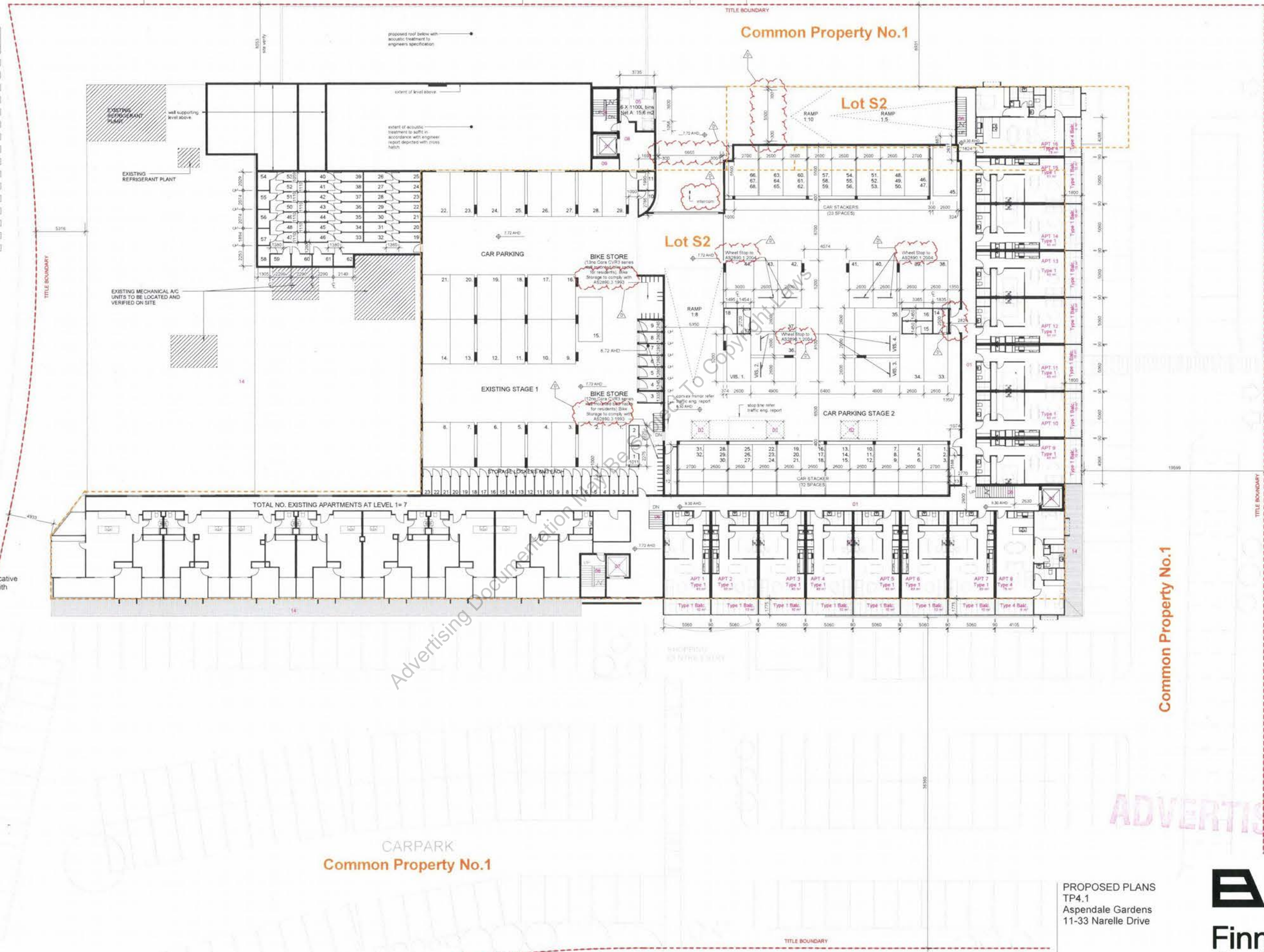
Name	Area
Type 1	43 m <sup>2</sup>
Type 1 Balc.	10 m <sup>2</sup>
Type 2	40 m <sup>2</sup>
Type 2 Balc.	10 m <sup>2</sup>
Type 3	21 m <sup>2</sup>
Type 3 Balc.	8 m <sup>2</sup>
Type 4	28 m <sup>2</sup>
Type 4 Balc.	8 m <sup>2</sup>
Type 5	28 m <sup>2</sup>
Type 5 Balc.	21 m <sup>2</sup>
Type 6	28 m <sup>2</sup>
Type 6 Balc.	21 m <sup>2</sup>
Type 7	87 m <sup>2</sup>
Type 7 Balc.	23 m <sup>2</sup>
Type 8	82 m <sup>2</sup>
Type 8 Balc.	42 m <sup>2</sup>

Plan Key

- 01 Passage
- 02 Skylight
- 03 Planter
- 04 Bike storage
- 05 Refuse Room
- 06 Stair access
- 07 Lift access
- 08 Lobby
- 09 Services
- 10 Internal Courtyard
- 11 Bench Seating
- 12 Ramp access
- 13 Courtyard void
- 14 Roof below

LEGEND

Dashed orange lines represent indicative title lot boundaries. To be verified with survey





PROPOSED PLANS

AREA SCHEDULE (Apartments)

Name	Area
Type 1	49 m <sup>2</sup>
Type 1 Balc.	10 m <sup>2</sup>
Type 2	46 m <sup>2</sup>
Type 2 Balc.	10 m <sup>2</sup>
Type 3	51 m <sup>2</sup>
Type 3 Balc.	8 m <sup>2</sup>
Type 4	78 m <sup>2</sup>
Type 4 Balc.	8 m <sup>2</sup>
Type 5	78 m <sup>2</sup>
Type 5 Balc.	21 m <sup>2</sup>
Type 6	78 m <sup>2</sup>
Type 6 Balc.	21 m <sup>2</sup>
Type 7	87 m <sup>2</sup>
Type 7 Balc.	23 m <sup>2</sup>
Type 8	82 m <sup>2</sup>
Type 8 Balc.	42 m <sup>2</sup>

Plan Key

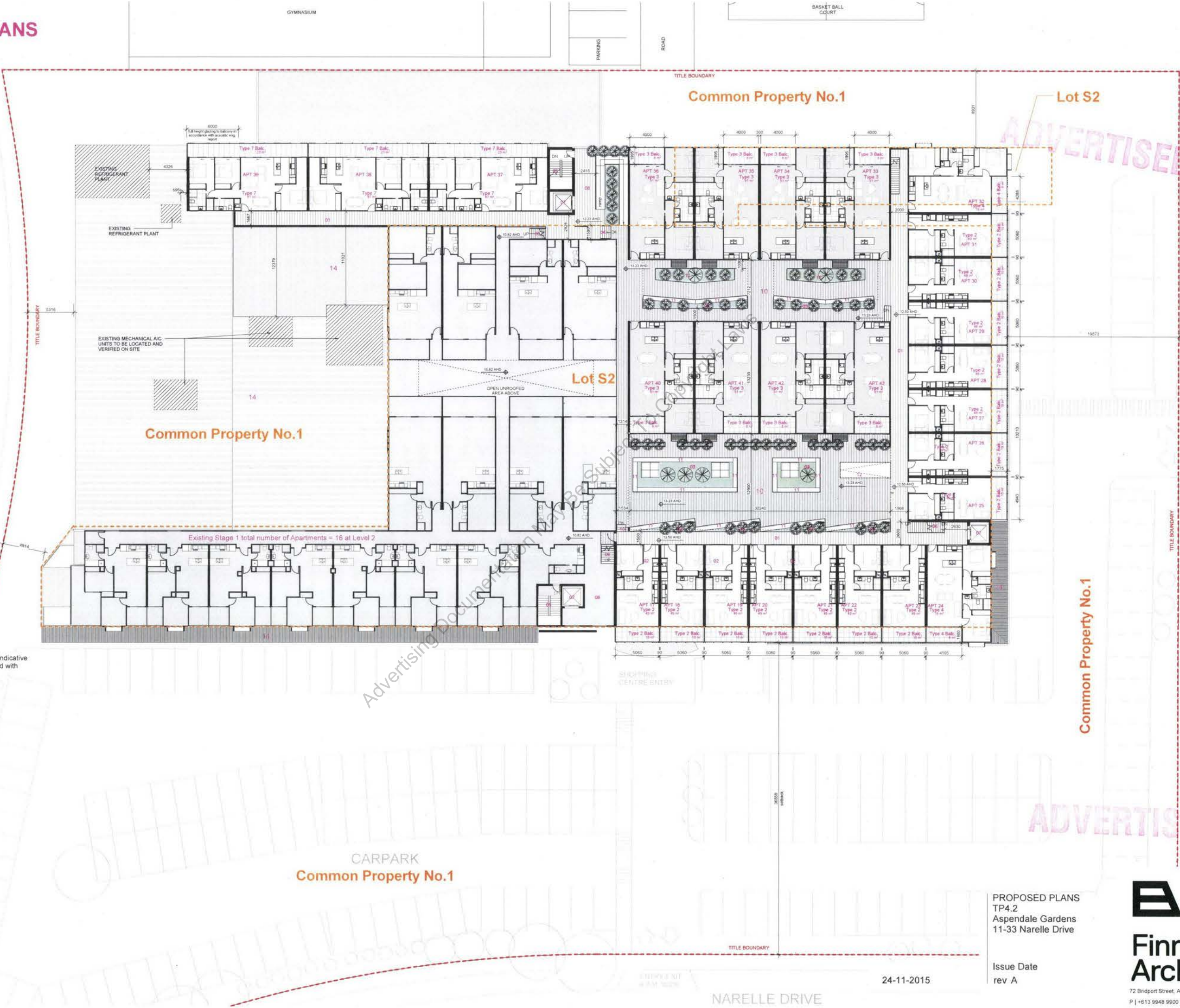
- 01 Passage
- 02 Skylight
- 03 Planter
- 04 Bike storage
- 05 Refuse Room
- 06 Stair access
- 07 Lift access
- 08 Lobby
- 09 Services
- 10 Internal Courtyard
- 11 Bench Seating
- 12 Ramp access
- 13 Courtyard void
- 14 Roof below

SCHEMATIC PLANTING LEGEND

- SMALL TREE - 4m MATURE HEIGHT
- SHRUB - 0.5m MAX. MATURE HEIGHT

LEGEND

Dashed orange lines represent indicative title lot boundaries. To be verified with survey





PROPOSED PLANS

AREA SCHEDULE (Apartments)

Name	Area
Type 1	49 m²
Type 1 Balc.	10 m²
Type 2	49 m²
Type 2 Balc.	10 m²
Type 3	91 m²
Type 3 Balc.	8 m²
Type 4	78 m²
Type 4 Balc.	9 m²
Type 5	78 m²
Type 5 Balc.	21 m²
Type 6	78 m²
Type 6 Balc.	21 m²
Type 7	87 m²
Type 7 Balc.	23 m²
Type 8	82 m²
Type 8 Balc.	42 m²

Plan Key

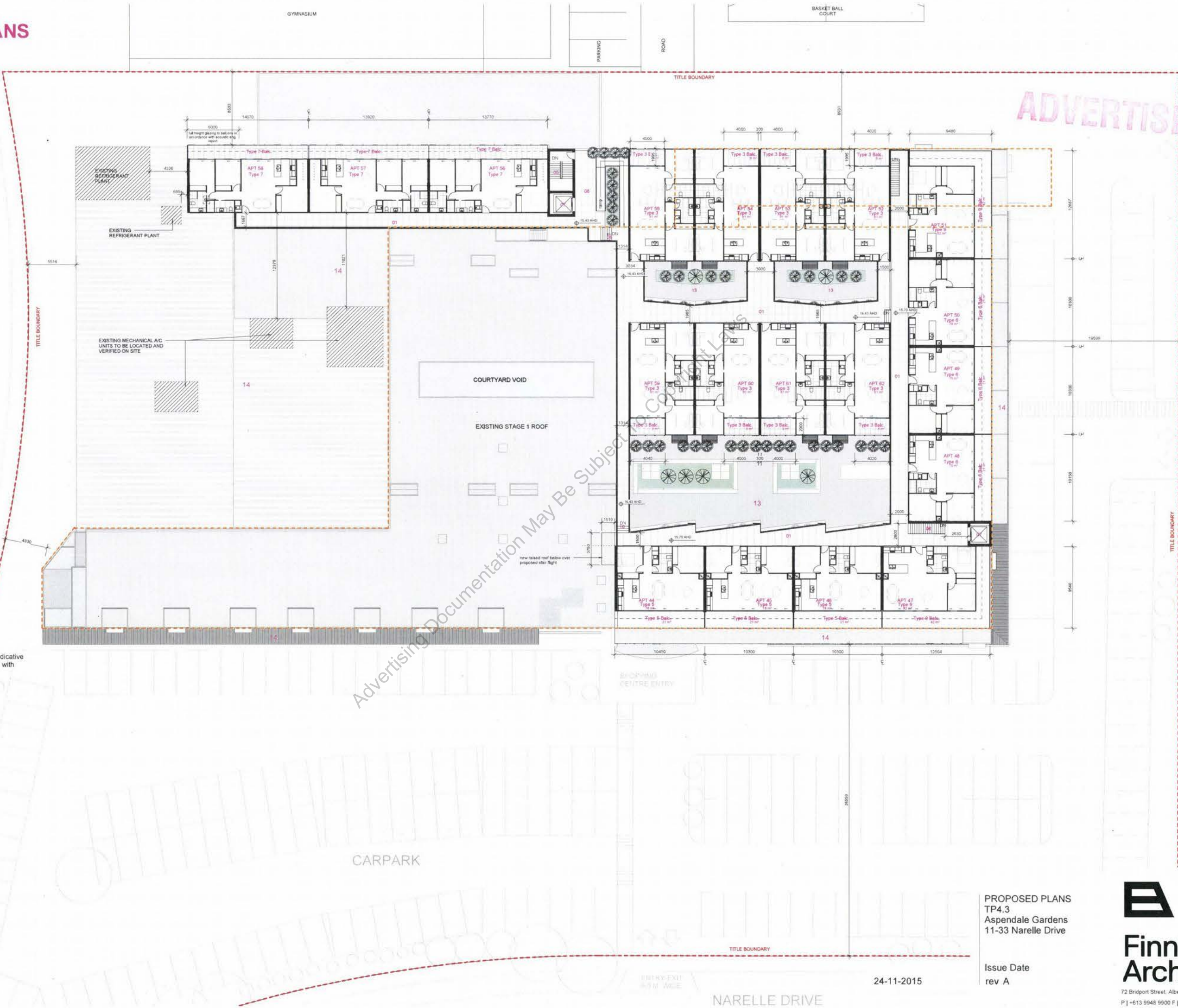
- 01 Passage
- 02 Skylight
- 03 Planter
- 04 Bike storage
- 05 Refuse Room
- 06 Stair access
- 07 Lift access
- 08 Lobby
- 09 Services
- 10 Internal Courtyard
- 11 Bench Seating
- 12 Ramp access
- 13 Courtyard void
- 14 Roof below

SCHEMATIC PLANTING LEGEND

- SMALL TREE - 4m MATURE HEIGHT
- SHRUB - 2.5m MAX. MATURE HEIGHT

LEGEND

- Dashed orange lines represent indicative title lot boundaries. To be verified with survey



ADVERTISED

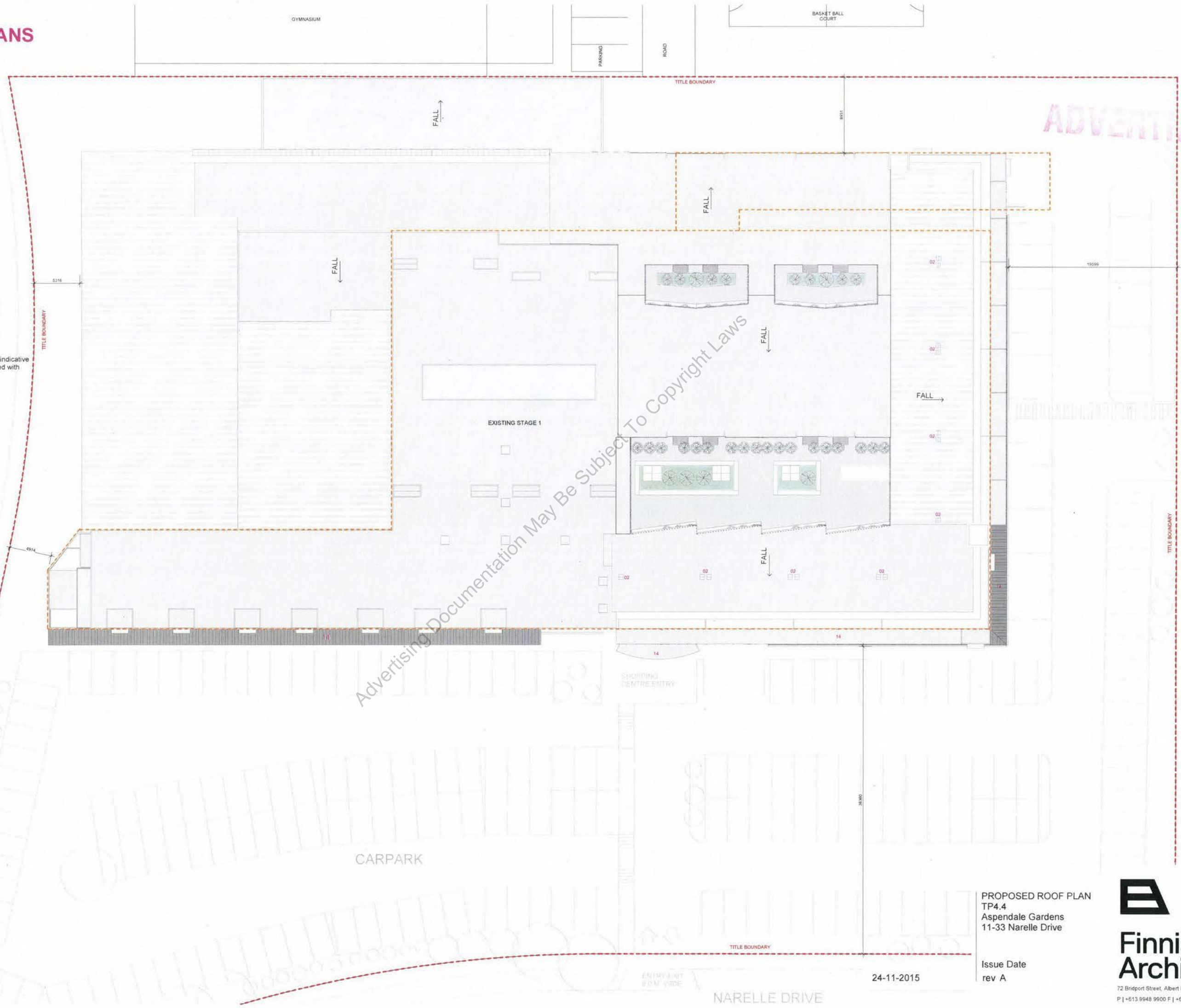


PROPOSED PLANS

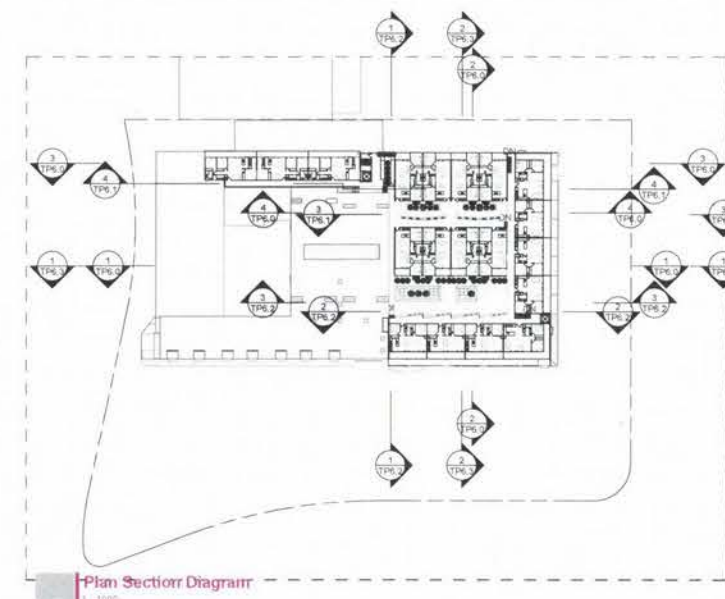
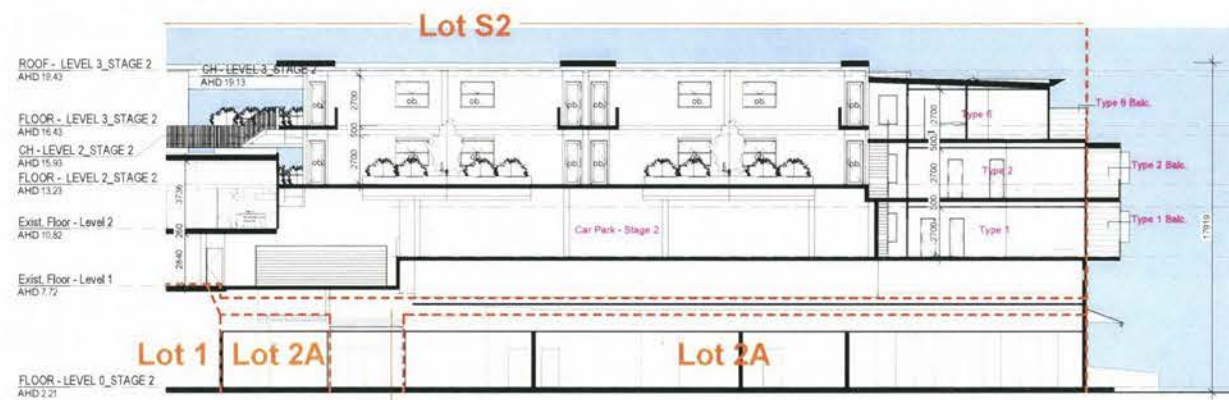
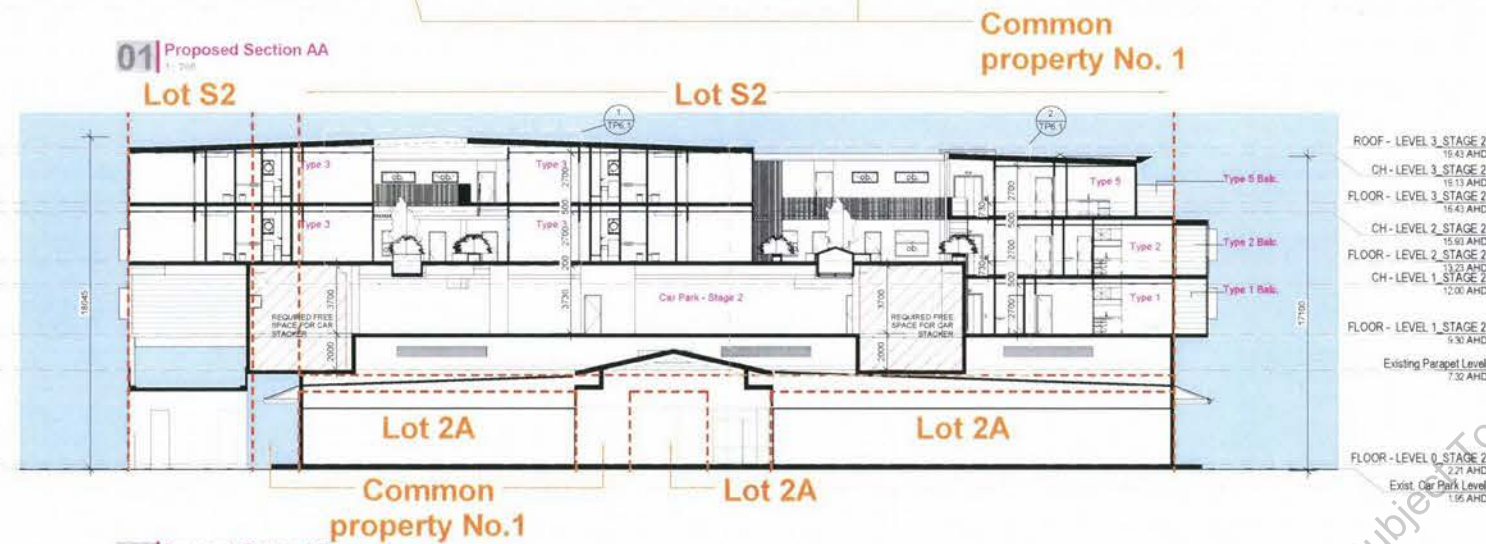
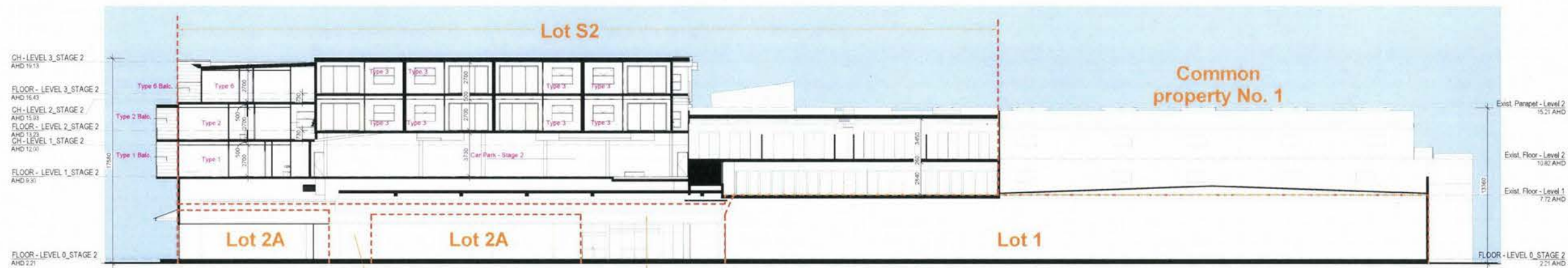
- Plan Key
- 01 Passage
  - 02 Skylight
  - 03 Planter
  - 04 Bike storage
  - 05 Refuse Room
  - 06 Stair access
  - 07 Lift access
  - 08 Lobby
  - 09 Services
  - 10 Internal Courtyard
  - 11 Bench Seating
  - 12 Ramp access
  - 13 Courtyard void
  - 14 Roof below

LEGEND

Dashed orange lines represent indicative title lot boundaries. To be verified with survey





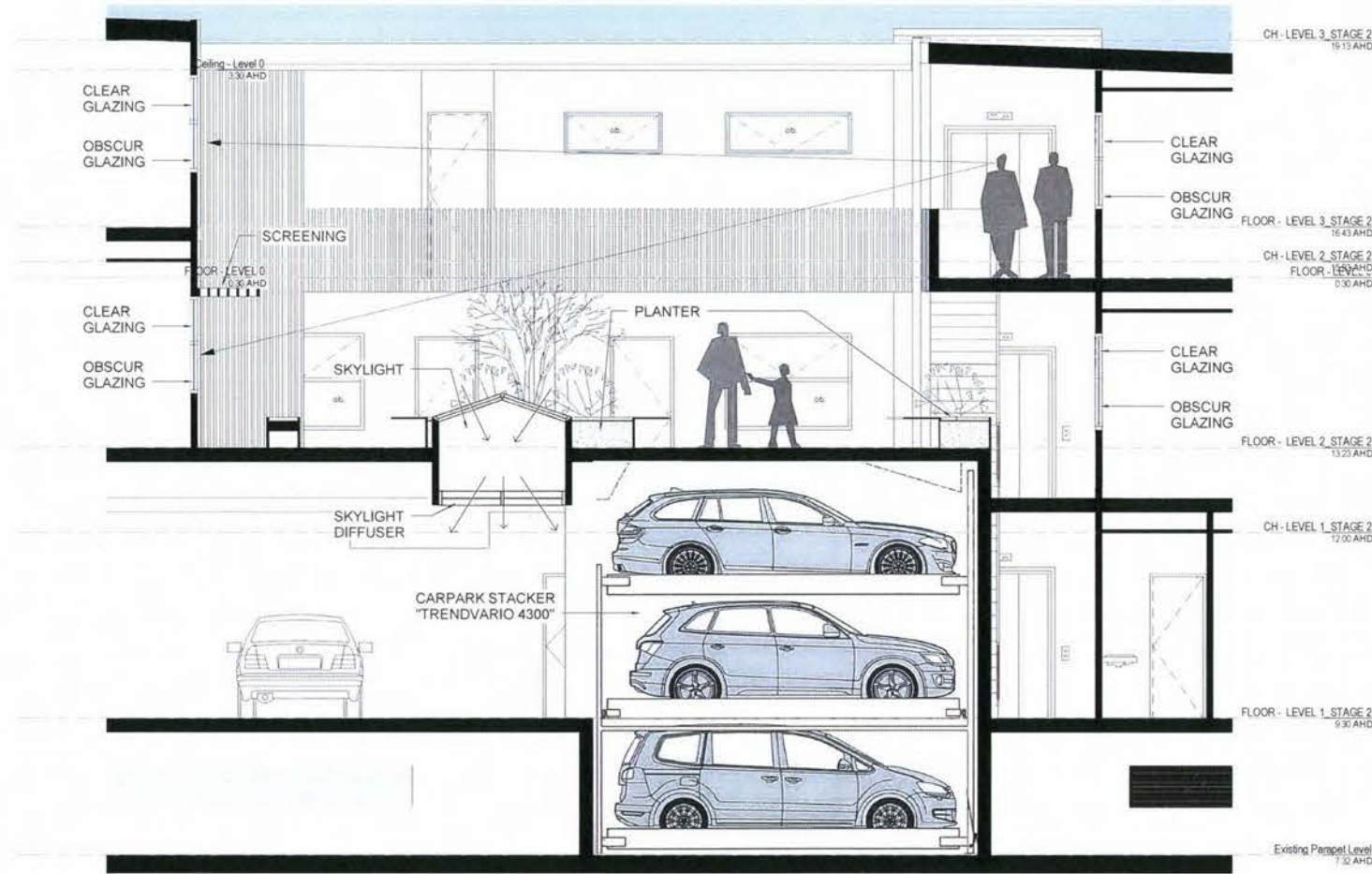


PROPOSED SECTIONS  
TP6.0  
Aspendale Gardens  
11-33 Narelle Drive

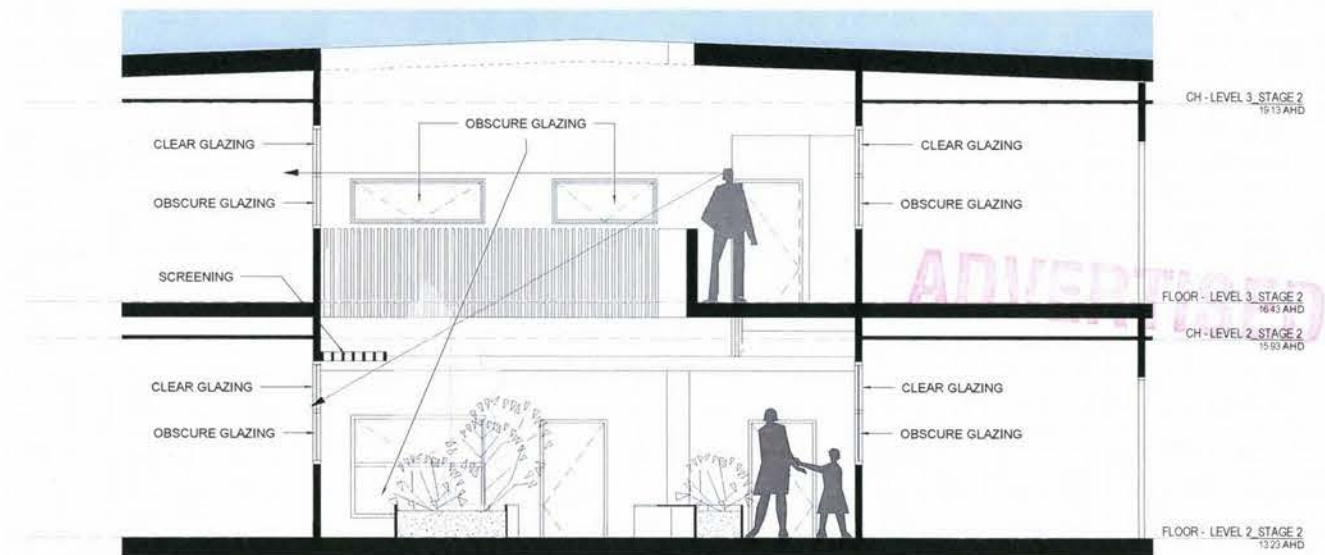
Issue Date  
rev D

15-03-2016

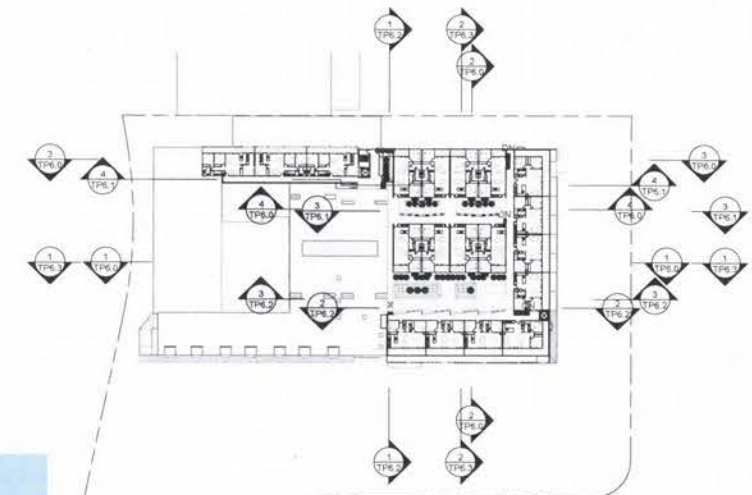




02 Proposed Section BB - Callout 2  
1:50



01 Proposed Section BB - Callout 1  
1:50



Plan Section Diagram  
1:1000



03 Section EE  
1:200



04 Section FF  
1:200

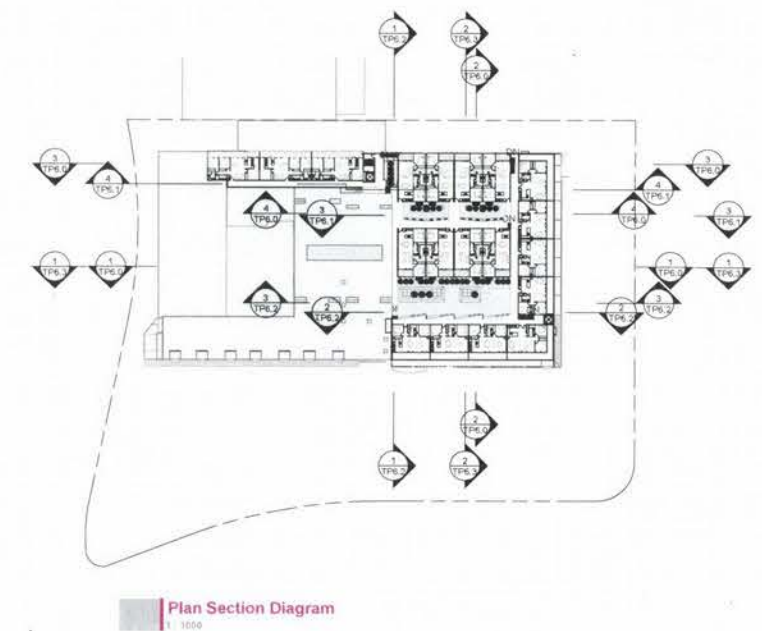
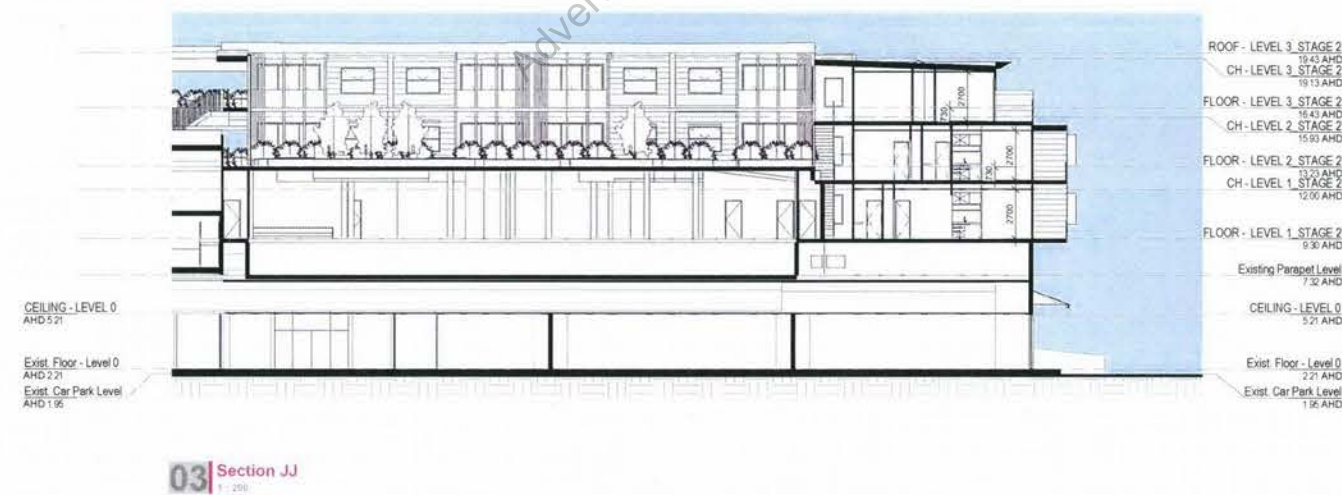
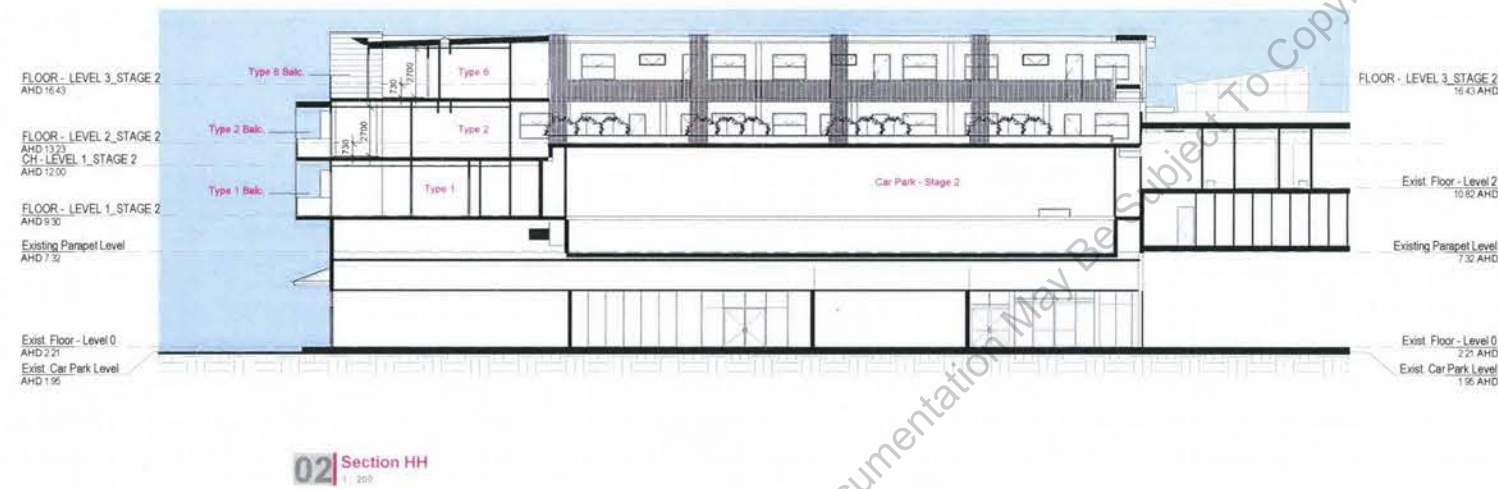
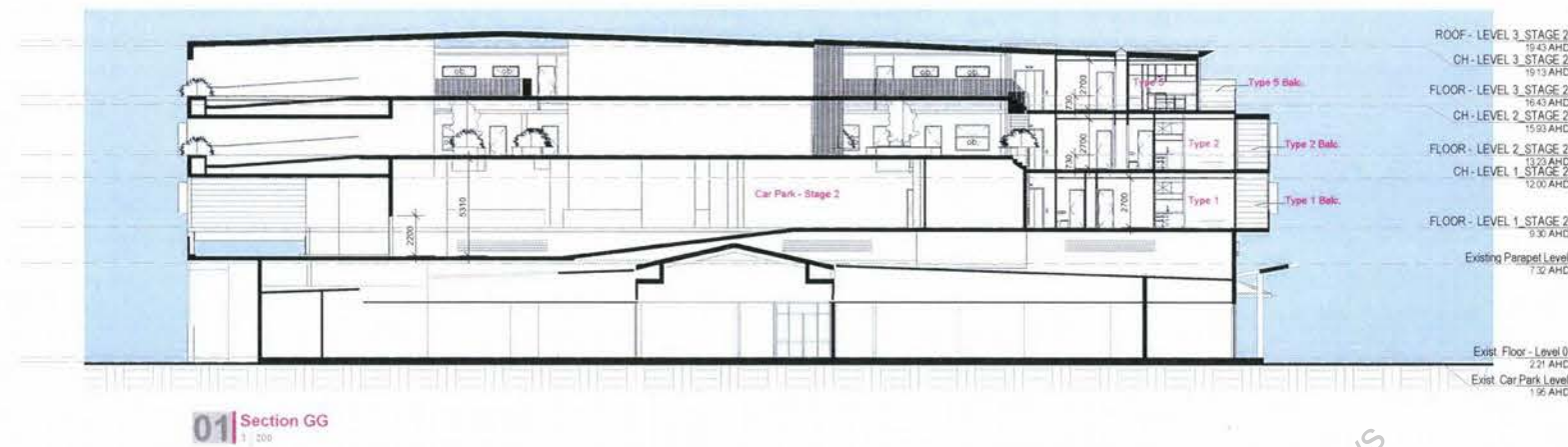
CH - LEVEL 3, STAGE 2  
19.13 AHD  
FLOOR - LEVEL 3, STAGE 2  
16.43 AHD  
CH - LEVEL 2, STAGE 2  
15.53 AHD  
FLOOR - LEVEL 2, STAGE 2  
13.23 AHD  
CH - LEVEL 1, STAGE 2  
12.00 AHD  
FLOOR - LEVEL 1, STAGE 2  
9.30 AHD  
Existing Parapet Level  
7.32 AHD  
Exist Floor - Level 0  
2.21 AHD

PROPOSED SECTIONS  
TP6.1  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev A

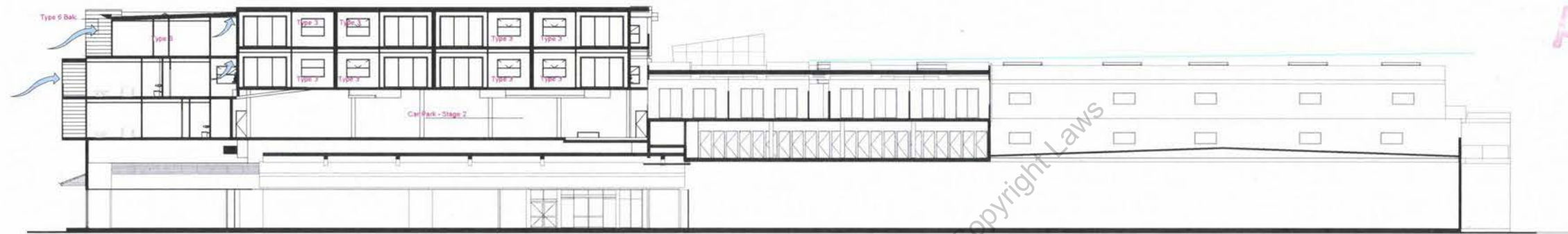
24-11-2015





24-11-2015





01 Cross Ventilation Diagram AA  
1 - 250

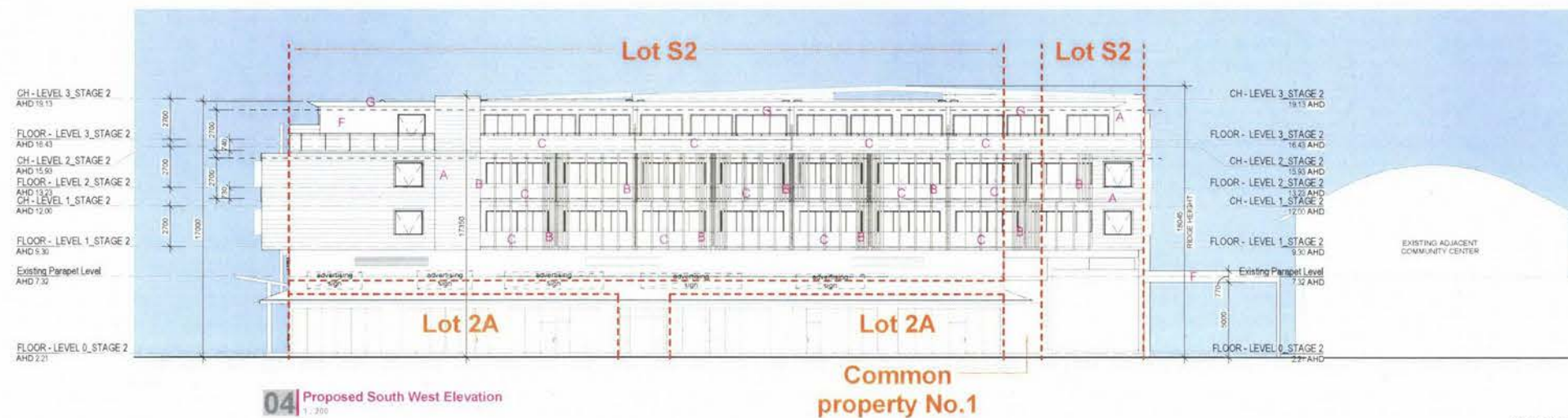
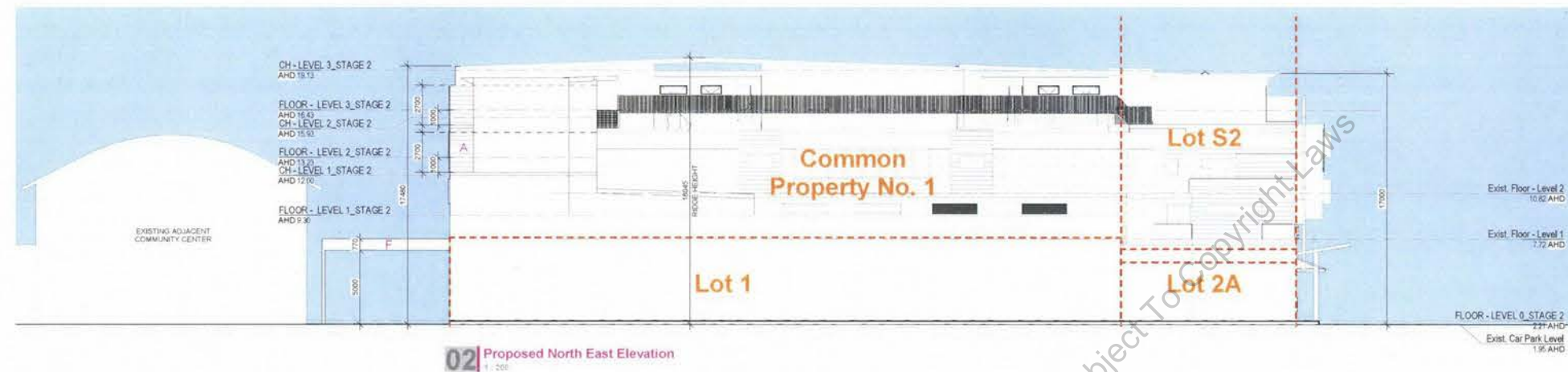
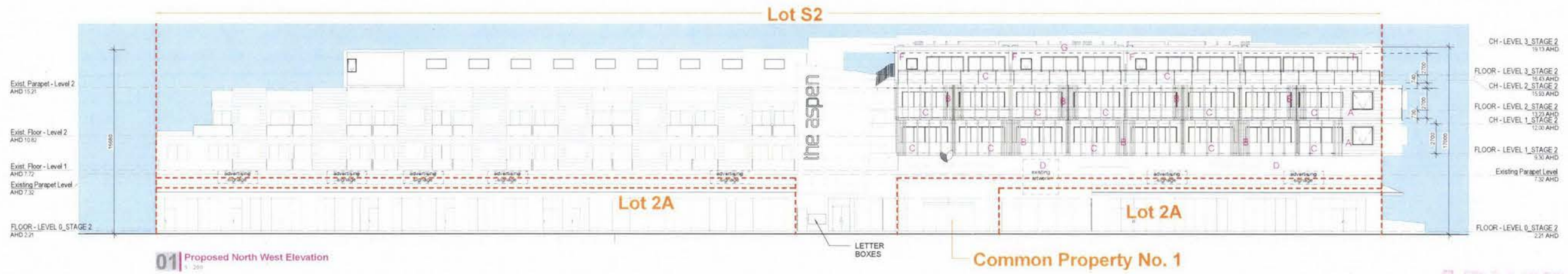


02 Cross Ventilation Diagram BB  
1 - 250

CROSS VENTILATION  
DIAGRAMS  
TP6.3  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev





ADVERTISED

- A Timber weatherboard cladding colour
- B Vertical Timber Slats
- C Frameless glass balustrade with satin chrome supports
- D Black return air grill
- E Timber Decking
- F Finish wall colour (Dark grey)
- G Composite Alucobond eave



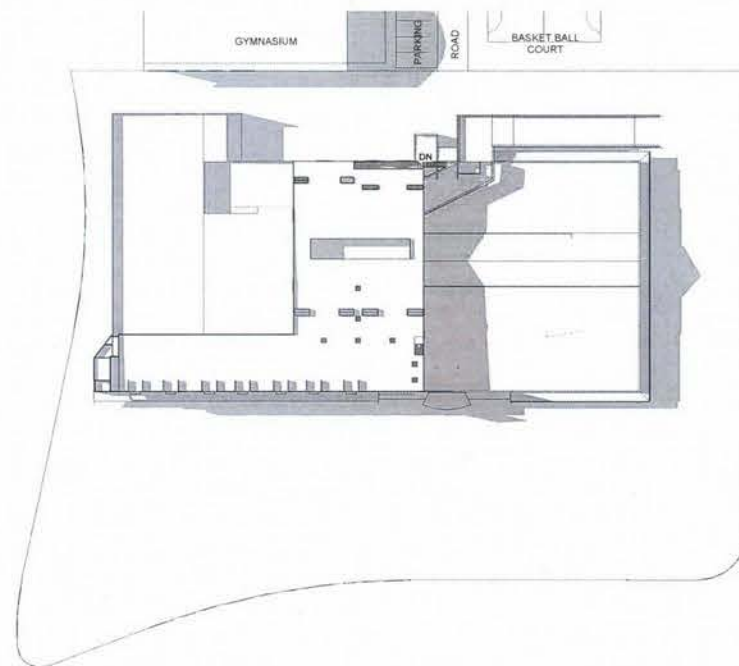
PROPOSED ELEVATIONS  
TP7.0  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev D

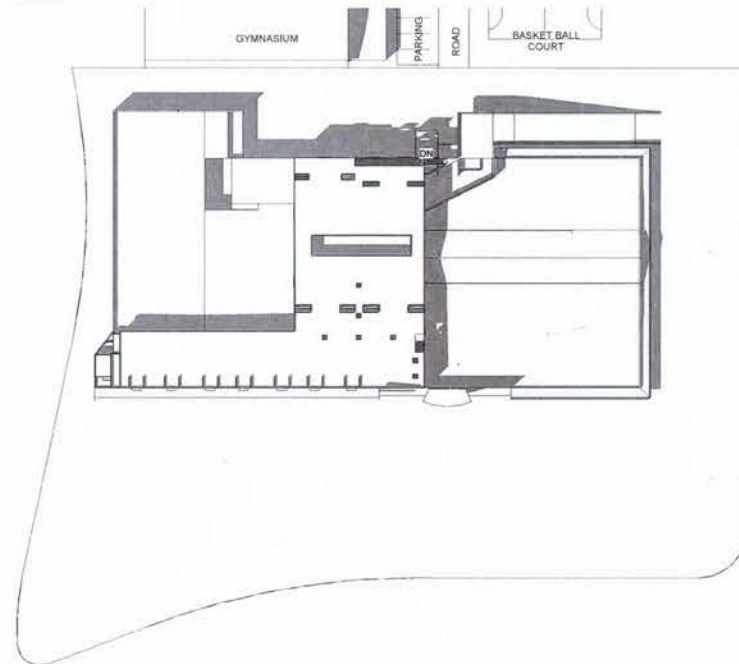
**Finnis Architects**  
72 Bridport Street, Albert Park 3206  
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15-03-2016

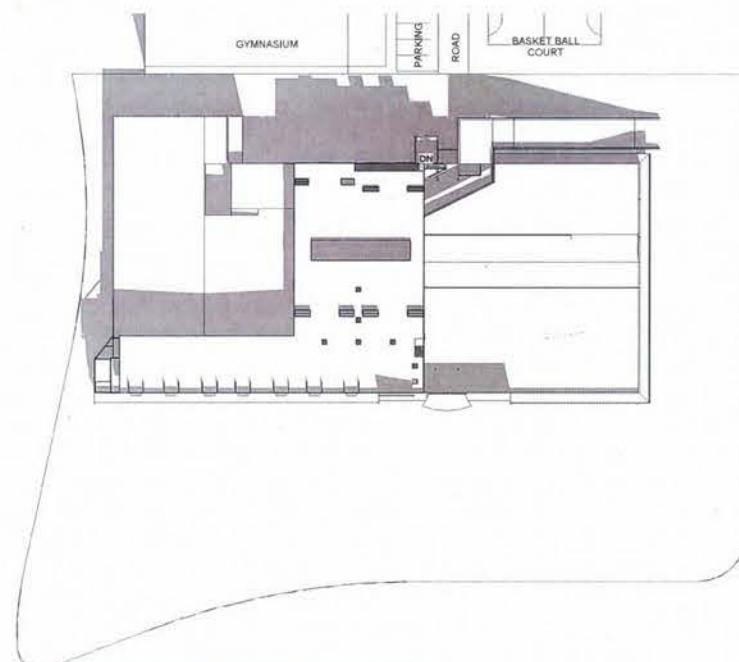




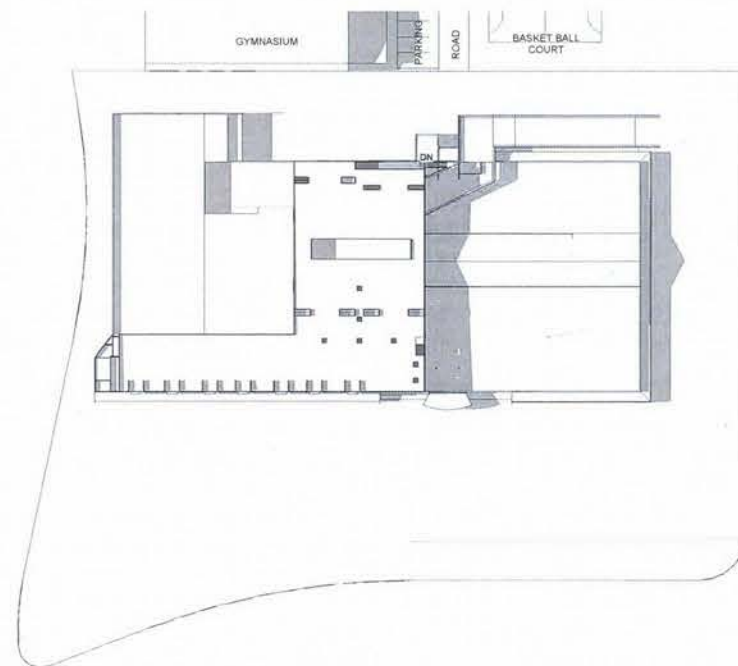
01| EXISTING OVERSHADOWING\_SEP.22ND @ 9AM  
1:150



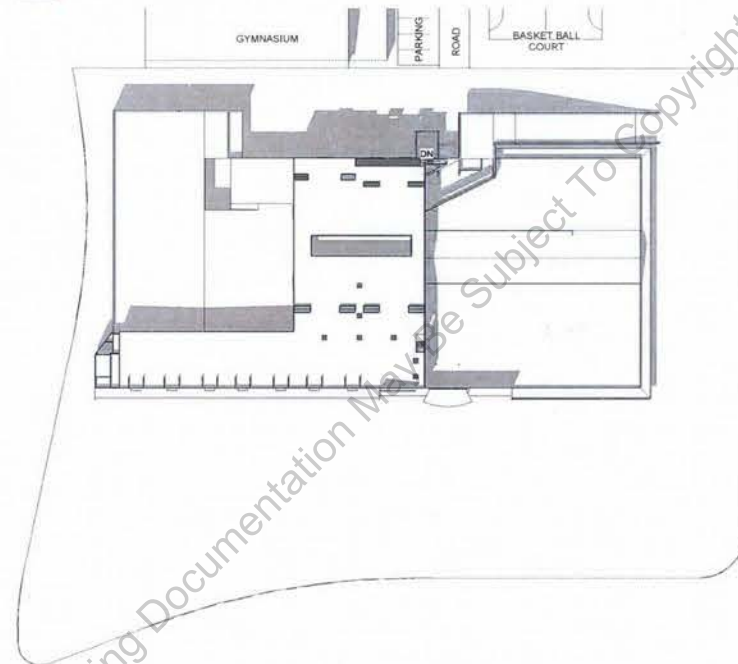
04| EXISTING OVERSHADOWING\_SEP.22ND @ 12PM  
1:150



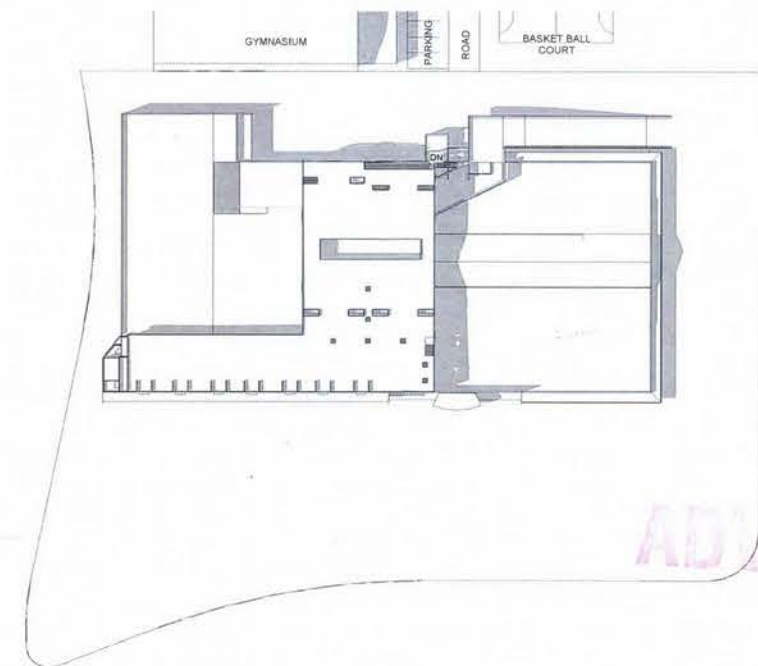
07| EXISTING OVERSHADOWING\_SEP.22ND @ 3PM  
1:150



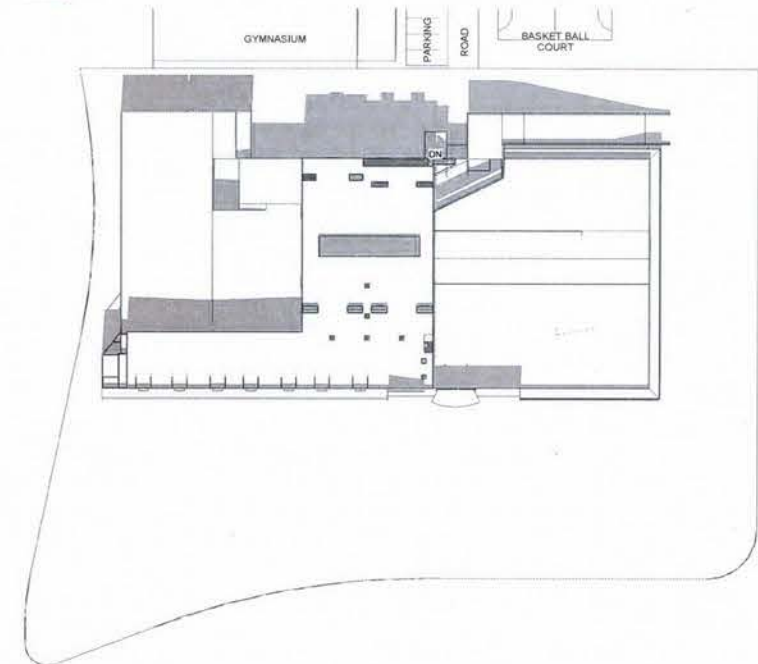
02| EXISTING OVERSHADOWING\_SEP.22ND @ 10AM  
1:150



05| EXISTING OVERSHADOWING\_SEP.22ND @ 1PM  
1:150



03| EXISTING OVERSHADOWING\_SEP.22ND @ 11AM  
1:150



06| EXISTING OVERSHADOWING\_SEP.22ND @ 2PM  
1:150

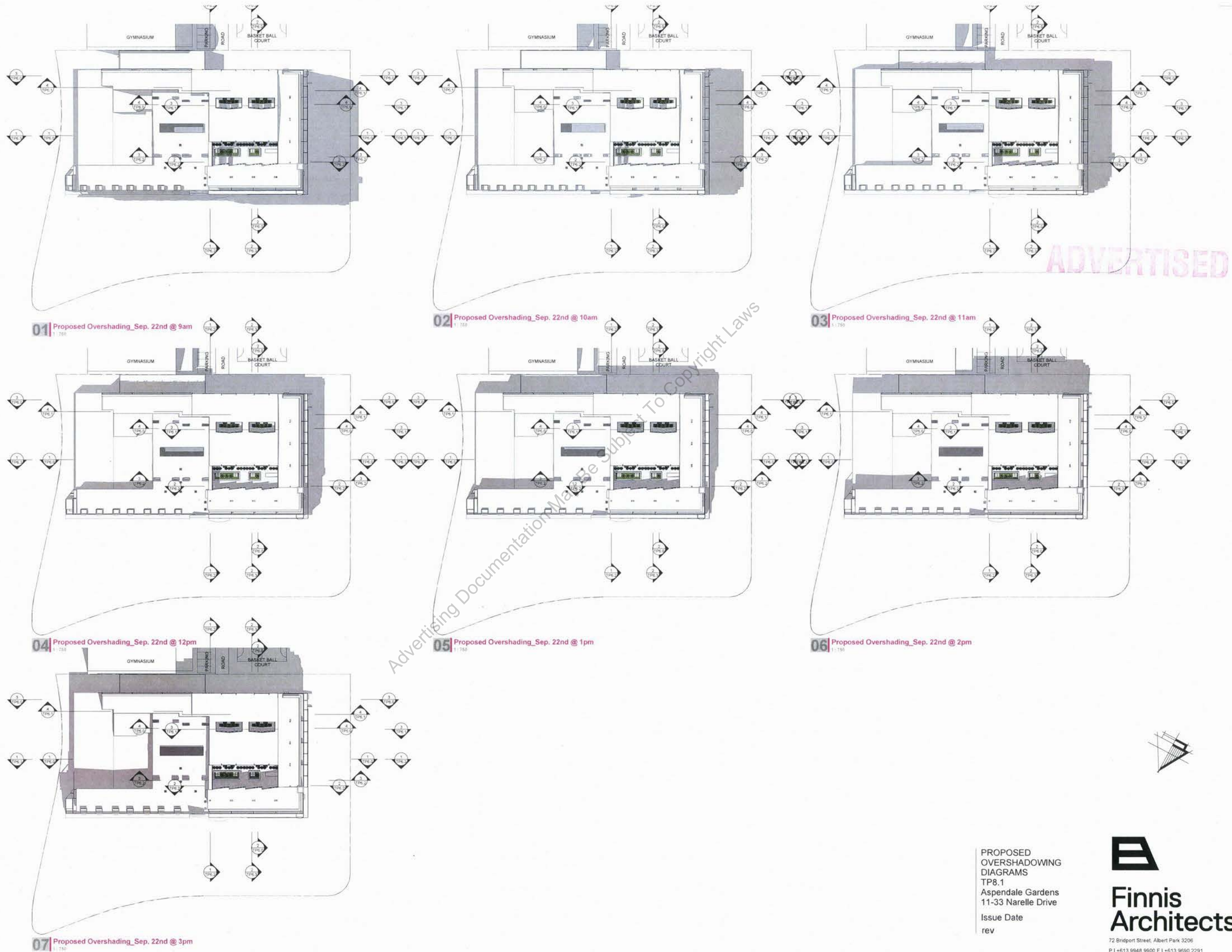
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EXISTING  
OVERSHADOWING  
DIAGRAMS  
TP8.0  
Aspendale Gardens  
11-33 Narelle Drive  
Issue Date  
rev

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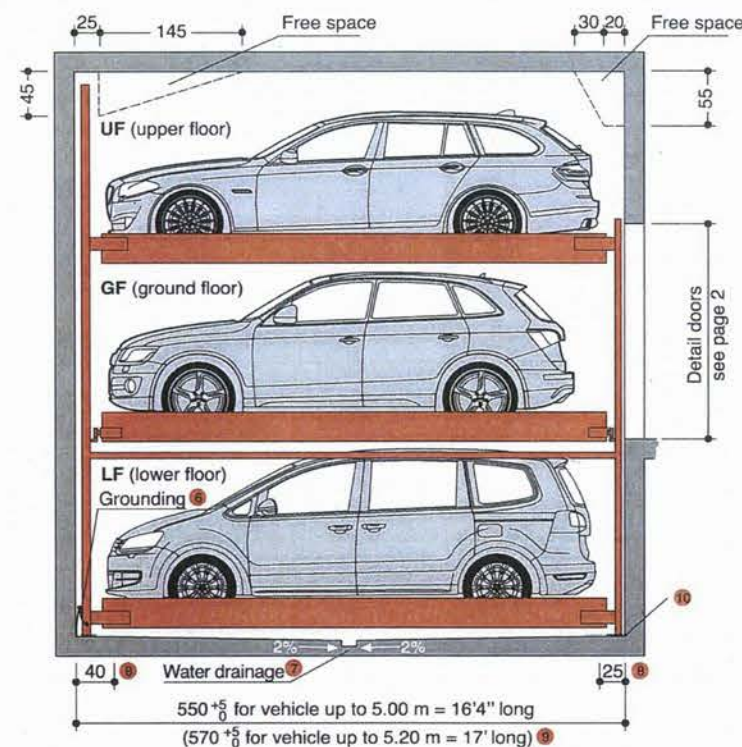


PROPOSED  
OVERSHADOWING  
DIAGRAMS  
TP8.1  
Aspendale Gardens  
11-33 Narelle Drive  
Issue Date  
rev





KLAUS Multiparking GmbH  
Hermann-Krum-Straße 2  
D-88319 Aitrach  
Fon +49 (0) 75 65 5 08-0  
Fax +49 (0) 75 65 5 08-88  
info@multiparking.com  
www.multiparking.com



## PRODUCT DATA

### trendvario 4300

2000 kg<sup>1</sup> / 2600 kg<sup>2</sup>

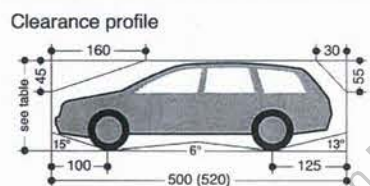
**Loadable up to 2600 kg!** Single parking spaces can also be upgraded to handle heavier loads at a later date!

**Dimensions**  
Tolerances for space requirements +3, -0  
Dimensions in cm.

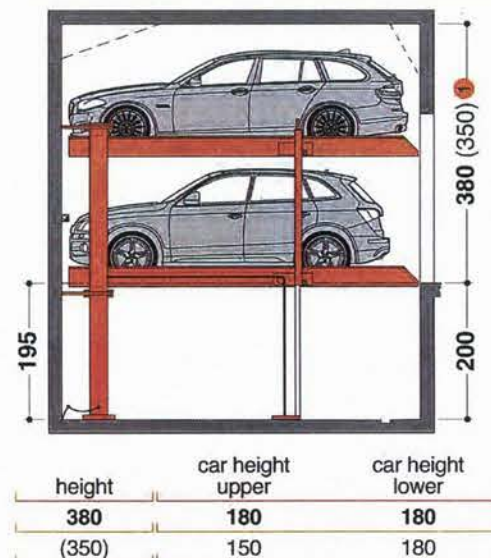
**Number of parking spaces**  
Min. 5 to max. 29 vehicles.

**Suitable for**  
Standard passenger cars:  
Limousine, station wagon, SUV, van  
according to clearance and maximal  
surface load.

	Standard	Special <sup>2</sup>
width	190 cm <sup>3</sup>	190 cm <sup>4</sup>
weight	max. 2000 kg	max. 2600 kg
wheel load	max. 500 kg	max. 650 kg



MultiBase 2072-195



height	car height upper	car height lower
380	180	180
(350)	150	180

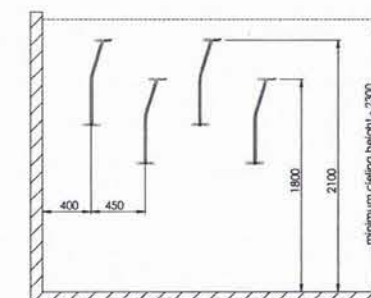
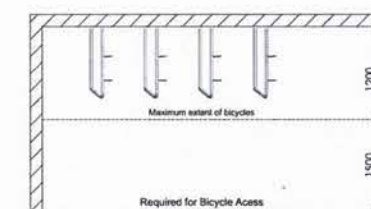
<sup>1</sup> If a higher ceiling height is available higher cars can be parked on the upper level.



Cora CVR3



ADVERTISED



Cora CVR3

Framing models:  
- Floor to Ceiling Mount Frame  
- Floor Mount Frame  
- Wall Mount Frame

Standard frame segment is 2300mm long and holds 5 bikes. Frames can be double sided to hold 10 bikes. Custom length frames available.

PROPOSED STORAGE  
FACILITIES  
TP9.0  
Aspendale Gardens  
11-33 Narelle Drive

Issue Date  
rev



Finnis  
Architects

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