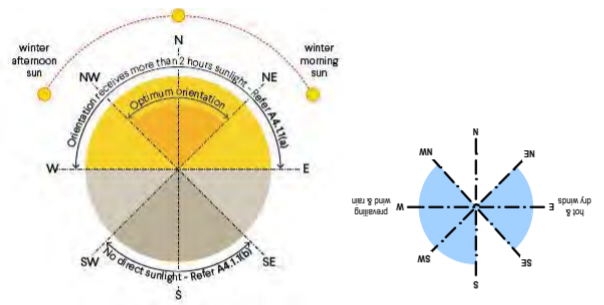


Local Area Context Plan

scale 1:12000



Legend

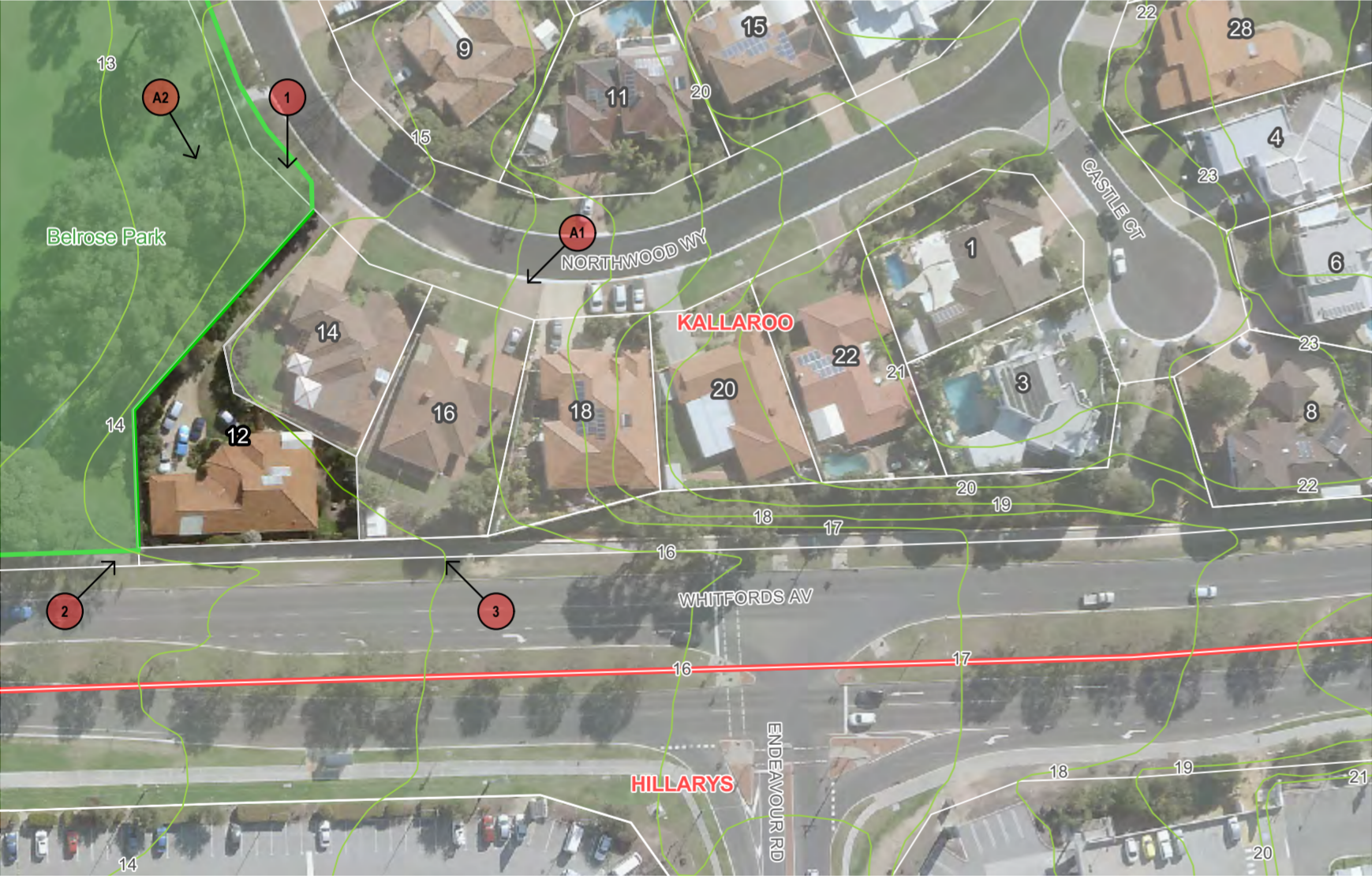
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[Purple Box]	COMMERICAL CENTRE
[Yellow Box]	CIVIC
[Orange Box]	HOUSING OPPORTUNITY AREA
[Red Dot]	BUS STOP
[Red Line]	MAJOR ROAD



Image Location 1



Image Location 2



Site Area Context Plan

scale 1:1000



Image Location 3



Image Location A1



Image Location A2

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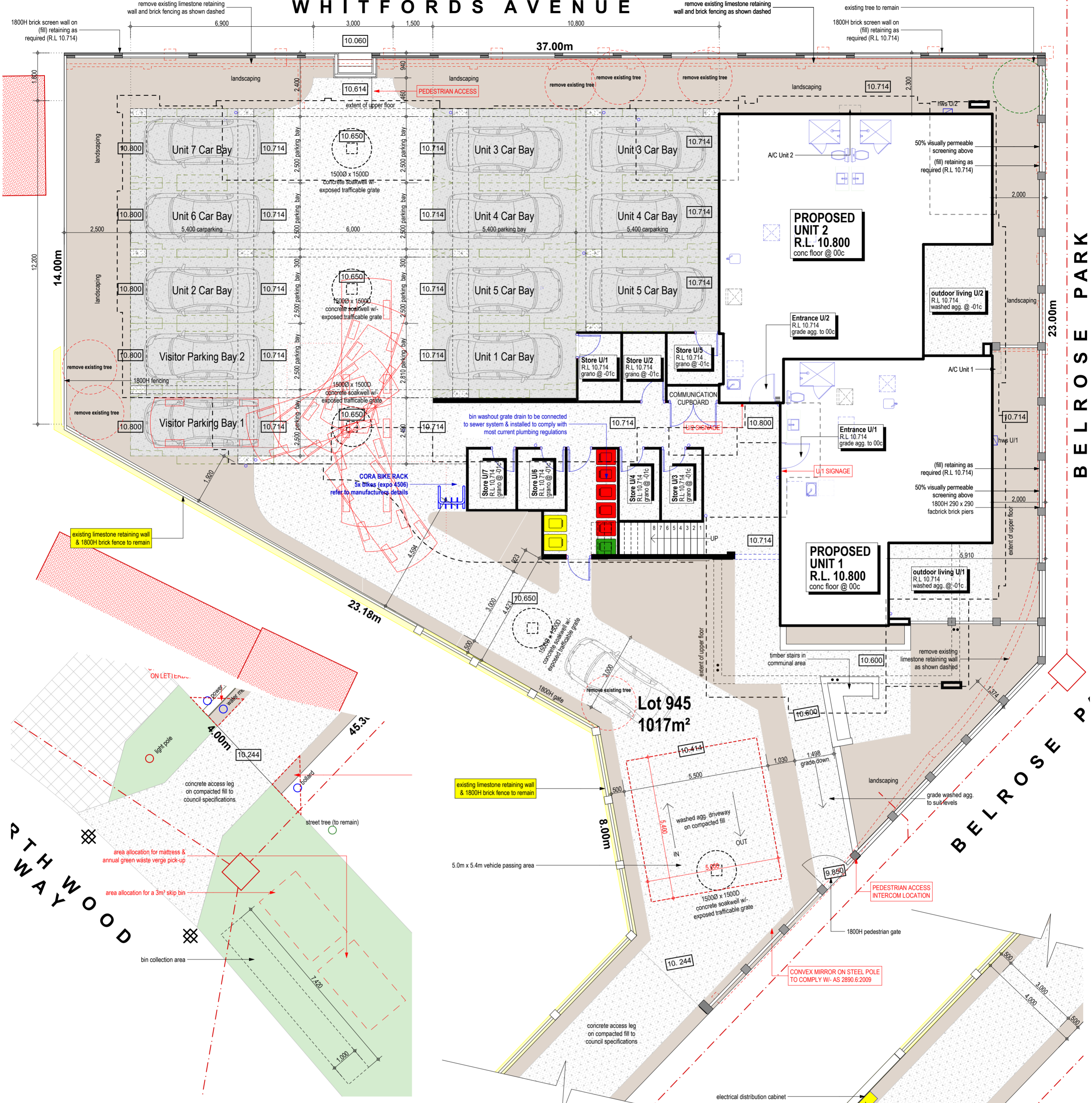
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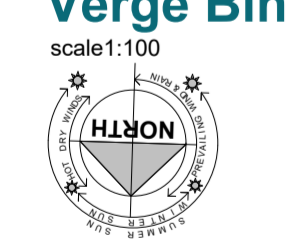
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Verge Bin & Yearly Bulk Waste Placement



Site Plan

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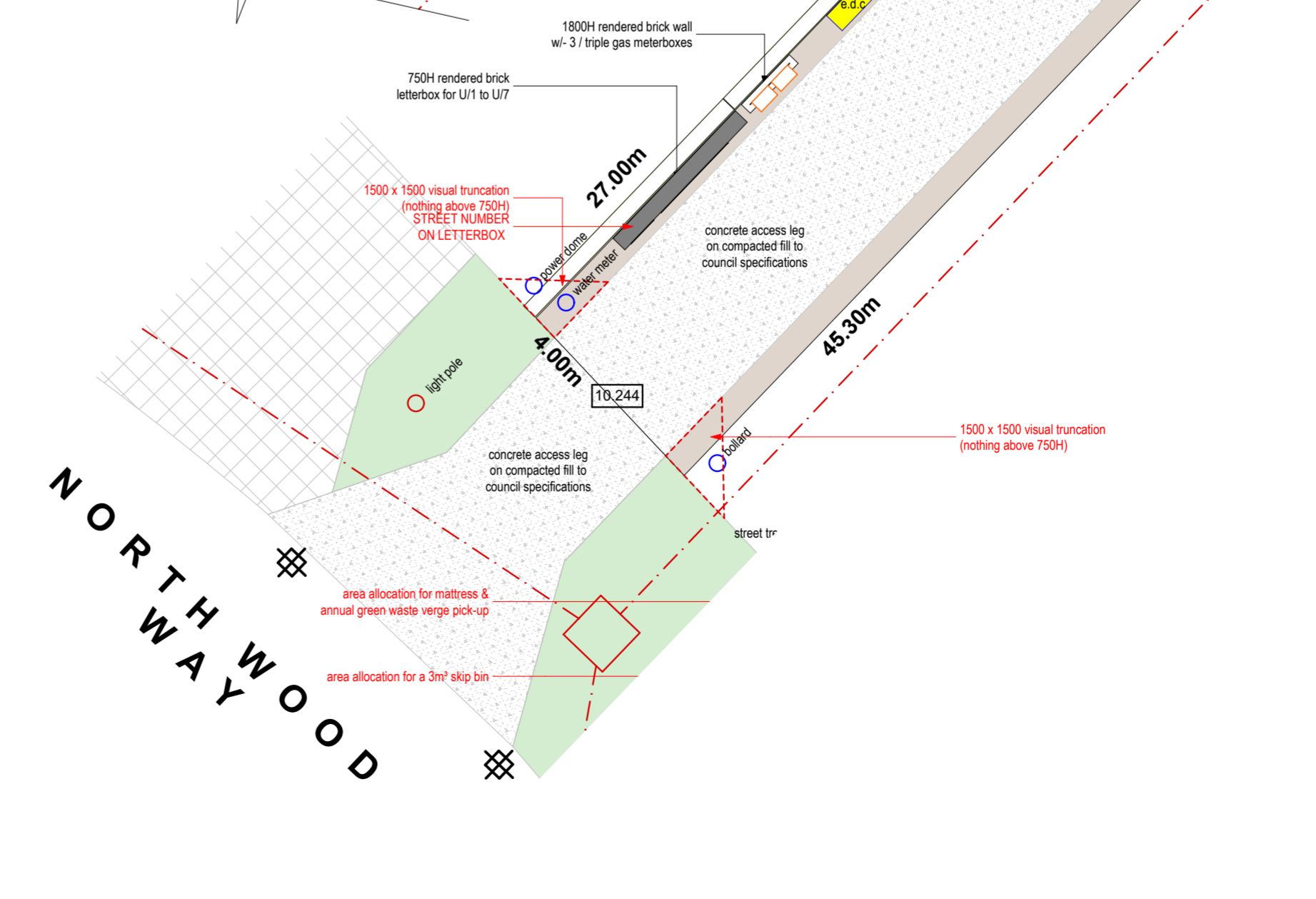
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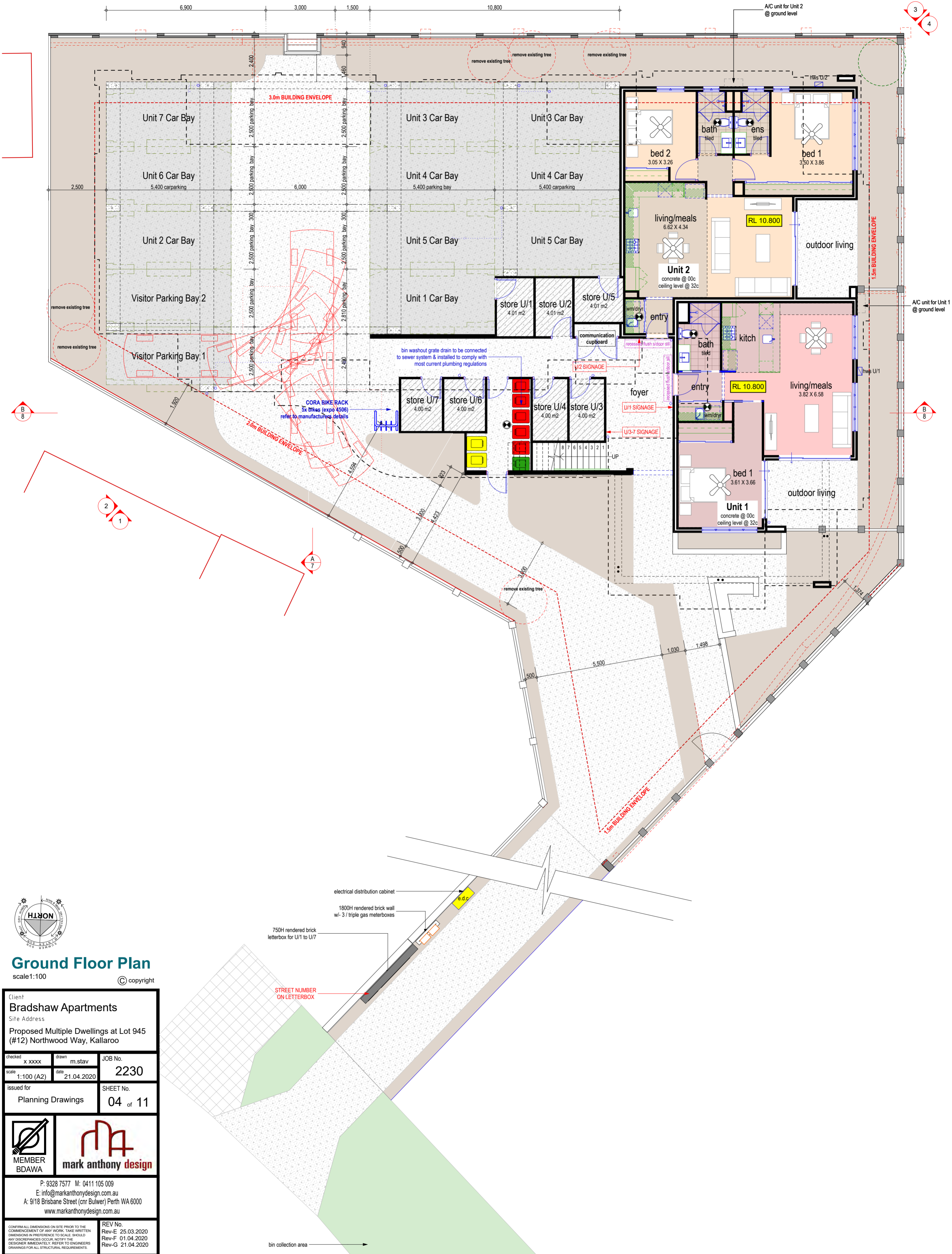
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Drawing Notes Legend

c	= BRICK COURSE HEIGHT	wc	= WATER CLOSET
dw	= DOWNPIPE	ww	= WASHING MACHINE
sp	= SPREADER	dy	= DRYER
rw	= RAIN WATER HEAD	dw	= DISHWASHER
dh	= DOOR HEIGHT DIMENSION	s	= SINK
ac	= AIR CONDITIONING	uo	= UNDER BENCH OVEN
ma	= MARKER	vb	= VANITY BASIN
sa	= SMOKE ALARM	ub	= UNDER BENCH OVEN
bs	= BEDROOM SOUNDING	tr	= TROUGH
td	= THERMAL DETECTOR	hp	= HOT PLATE
fw	= FLOOR WASTE	rh	= RANGEROOD
td	= TUNDRISH	ohc	= OVERHEAD CUPBOARDS



Ground Floor Plan

scale 1:100

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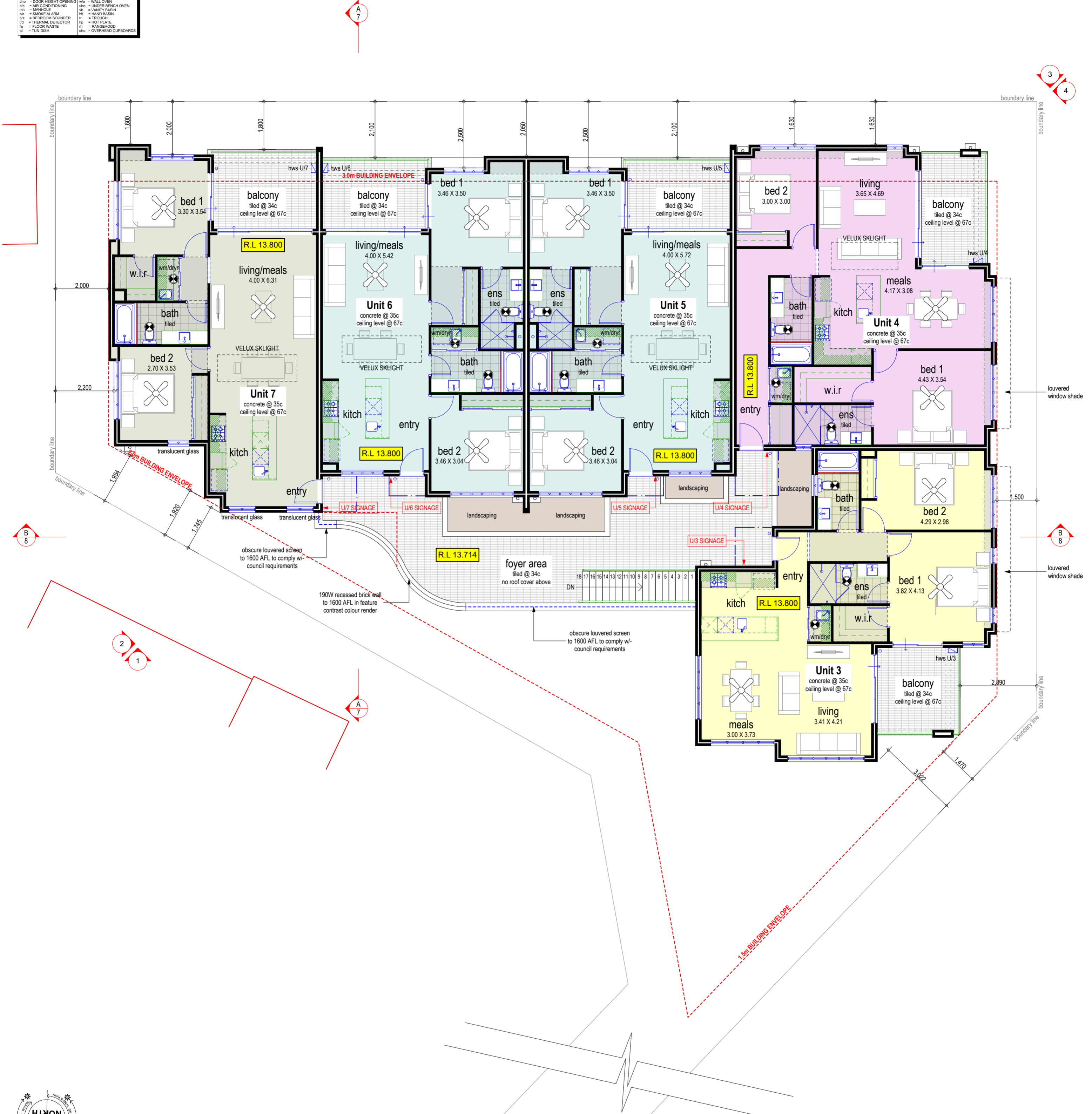
electrical distribution cabinet  
1800H rendered brick wall  
w/- 3 / triple gas meterboxes  
750H rendered brick  
letterbox for U/1 to U/7

STREET NUMBER  
ON LETTERBOX

bin collection area

Drawing Notes Legend


c	= BRICK COURSE HEIGHT	wc	= WATER CLOSET
h	= HATCH	wm	= WASHING MACHINE
dp	= DOWNPIPE	dy	= DRYER
sp	= SPREADER	dw	= DISHWASHER
rwh	= RAIN WATER HEAD	s	= SINK
dro	= DOOR HEIGHT OPENING	uo	= UNDER BENCH OVEN
ac	= AIR CONDITIONING	vb	= VANITY BASIN
mh	= MARKER	hb	= HAND BASIN
sa	= SMOKE ALARM	tr	= TROUGH
bs	= BEDROOM SOUNDING	hp	= HOT PLATE
td	= THERMAL DETECTOR	fr	= FRIDGE
fw	= FLOOR WASTE	ohc	= OVERHEAD CUPBOARDS
td	= TUN DISH		

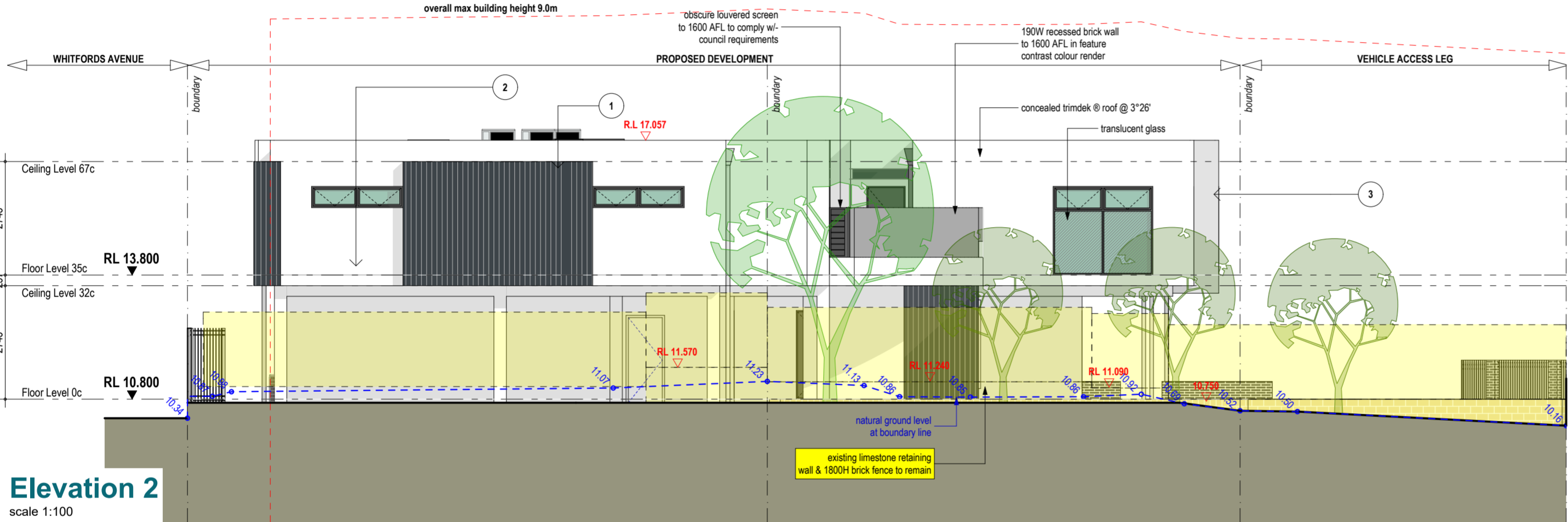
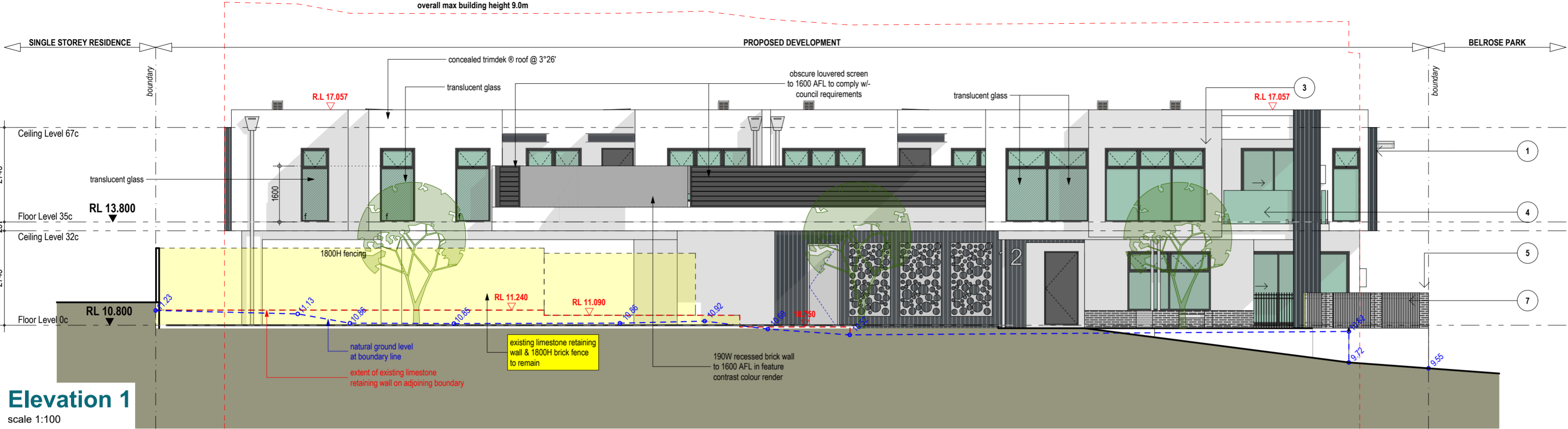


Upper Floor Plan

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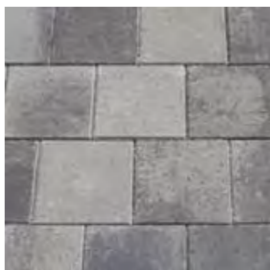
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Solar Access Table

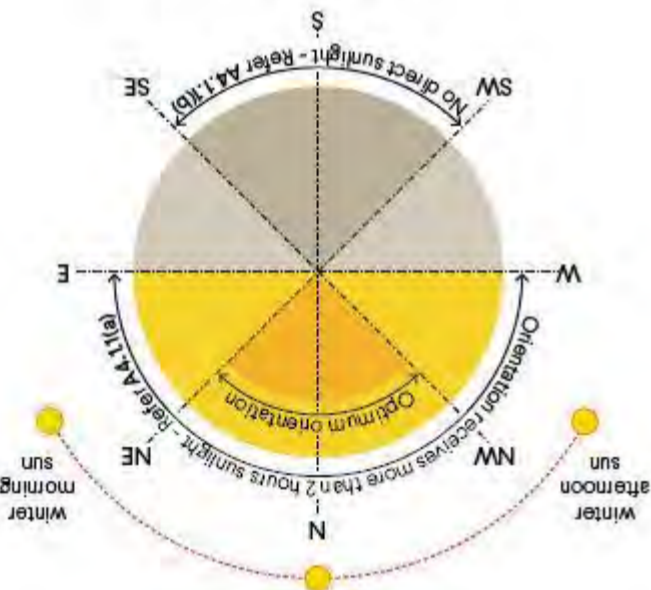
Unit	Type	receives < 2 hours sunlight
1	A	YES
2	B	YES
3	C	YES
4	D	YES
5	E	YES
6	E	YES
7	F	YES



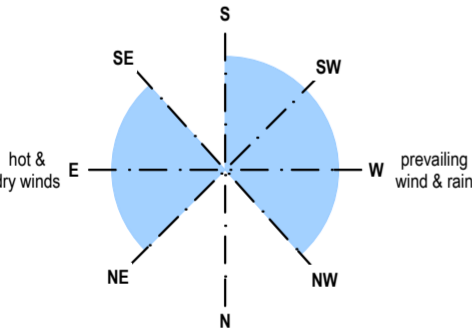
Sun Study & Ventilation Diagram (Upper Floor)  
scale1:200



Sun Study & Ventilation Diagram (Ground Floor)  
scale1:200



Sunlight Diagram  
as per Figure 4.1b



Prevailing Wind Direction


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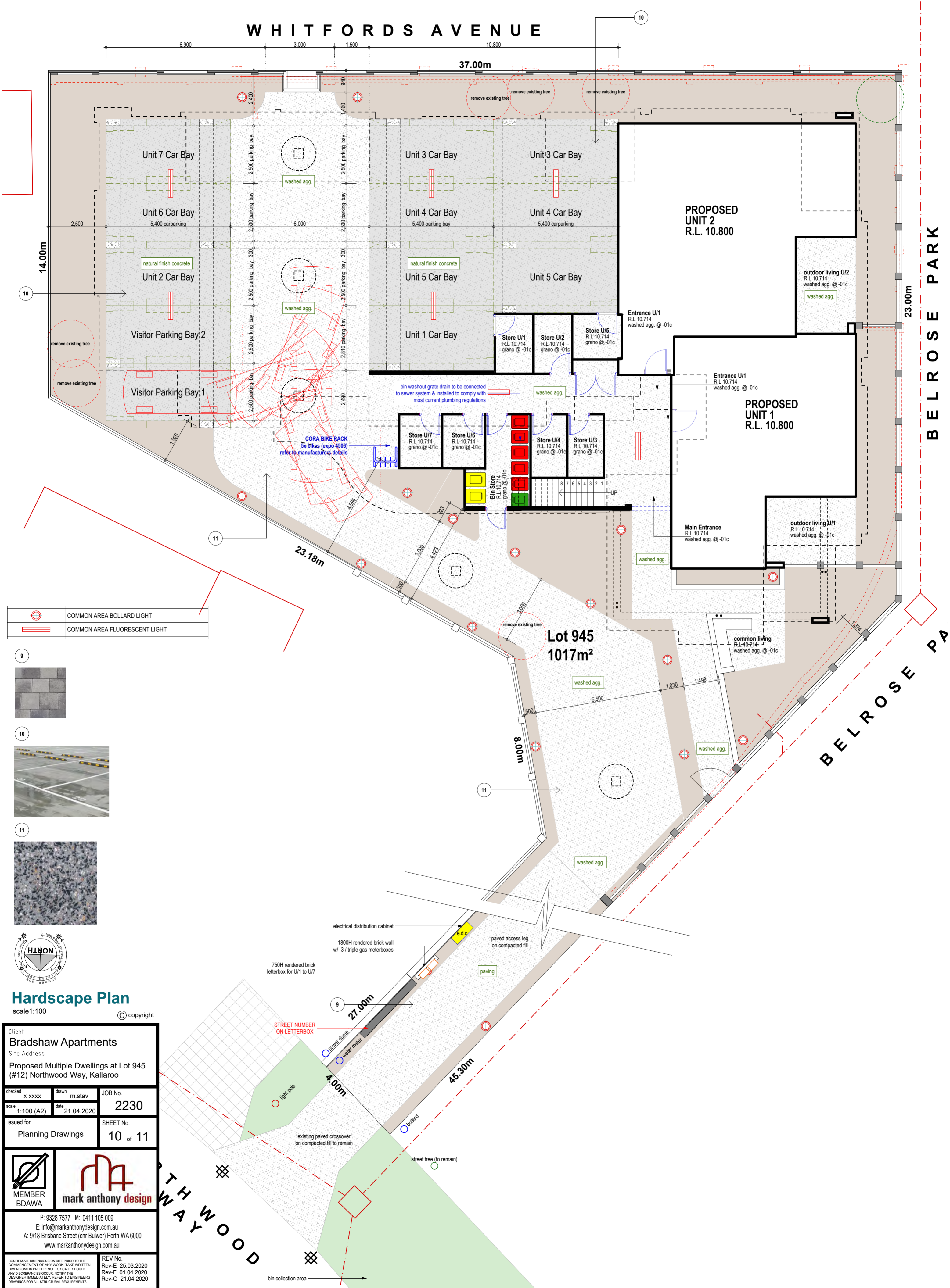
  
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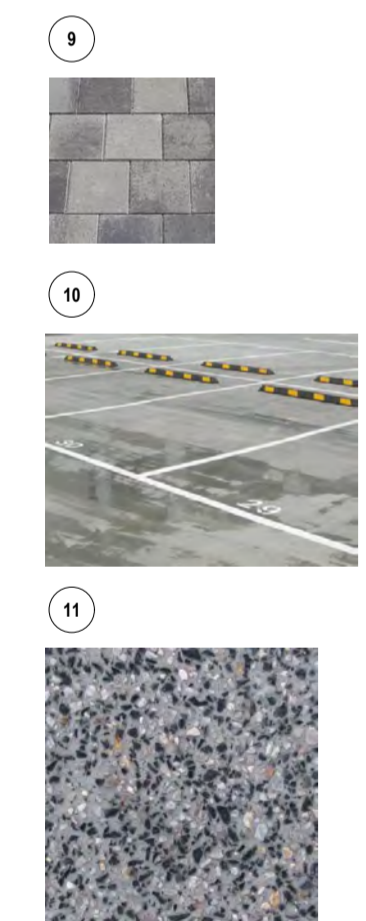
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	COMMON AREA BOLLARD LIGHT
	COMMON AREA FLUORESCENT LIGHT



### Hardscape Plan

scale 1:100

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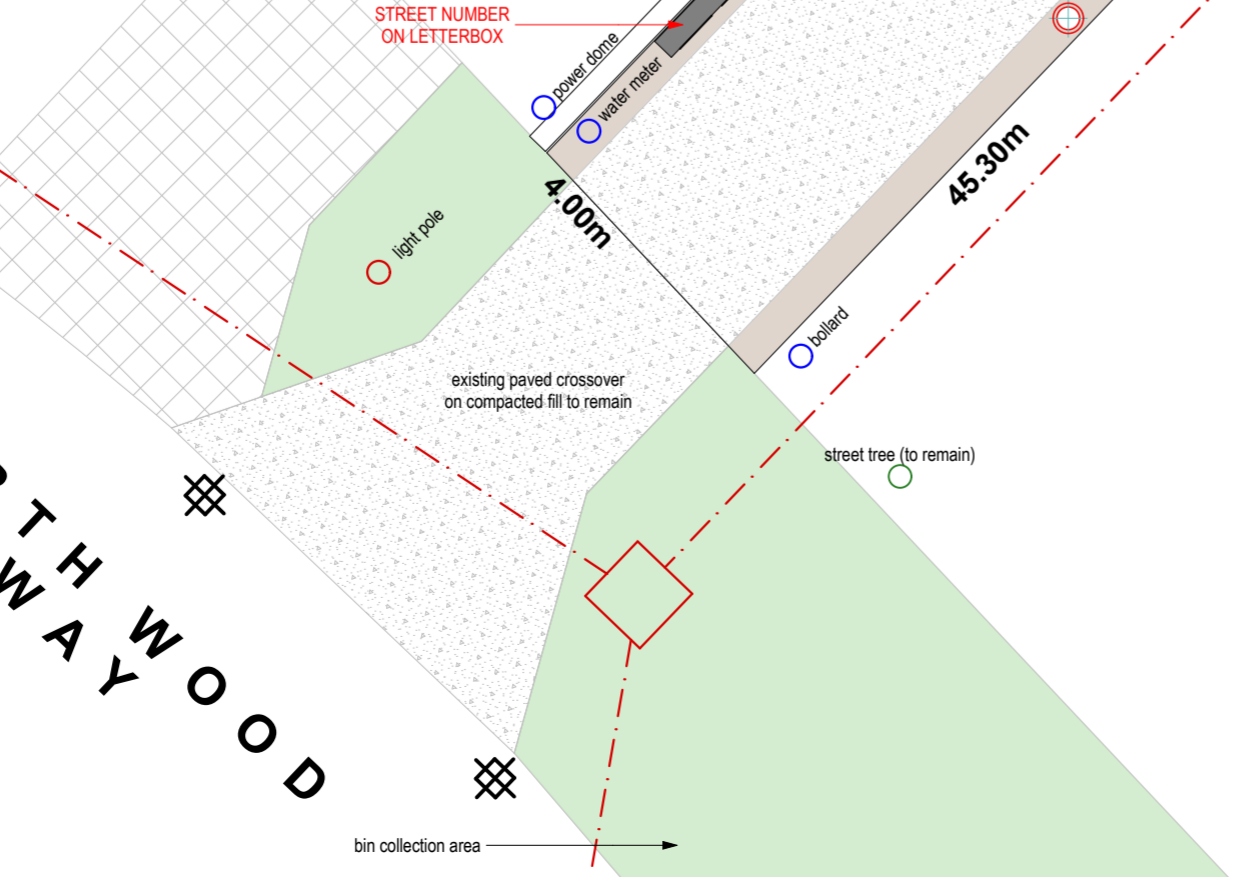
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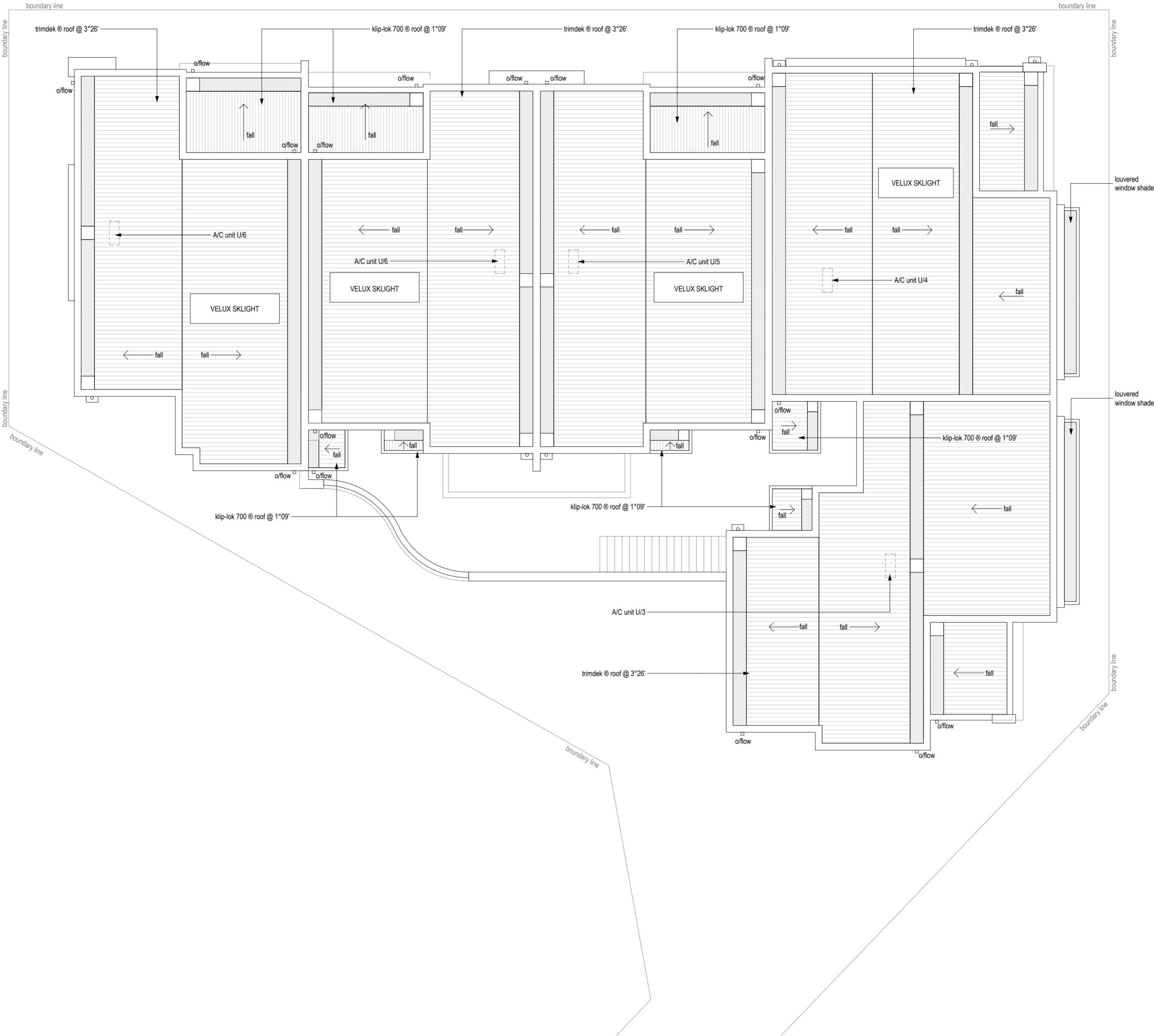
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Roof Plan


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# Bradshaw Apartments

Proposed Multiple Dwellings at Lot 945 (#12) Northwood Way, Kallaroo



View from Belrose Park



Whitfords Avenue Travelling East

Unit Area Schedule

Unit	Type	Plot Ratio Area	Alfresco	Balcony	Store	Total
1	A	66.36m²	32.56m²		4.01m²	104.93m²
2	B	87.69m²	26.96m²		4.01m²	118.65m²
3	C	95.97m²		10.26m²	4.00m²	110.23m²
4	D	101.10m²		10.51m²	4.00m²	115.61m²
5	E	85.40m²		10.51m²	4.01m²	99.92m²
6	E	85.28m²		10.85m²	4.00m²	100.13m²
7	F	86.30m²		12.00m²	4.00m²	102.30m²
Total		608.10m²				751.77m²

Unit Type Schedule

Code	Level	Type	Combination	Total
	GF	A	1B x 1B	1
	UF	B	2B x 2B	1
	UF	C	2B x 2B	1
	UF	D	2B x 2B	1
	UF	E	2B x 2B	2
	UF	F	2B x 1B	1
Total				7

On-Site Parking

Location	A
Vehicle Parking - Residential	10
Vehicle Parking - Visitors	2
Motorbike Parking	0
Total	12
Bicycle Parking - Residential	4
Bicycle Parking - Visitors	1
Total	5

Building Size

Lot Area	1017m²
Residential Zoning	R40
Max. Plot Ratio	.6
Max. Plot Ratio Area	610.20m²
Calculated Plot Ratio	.597
Calculated Plot Ratio Area	608.10m²

Combination	No	GF	UF
1B x 1B	1	1	
2B x 1B	1		1
2B x 2B	5	1	4
Total	7	2	5



Whitfords Avenue Travelling West



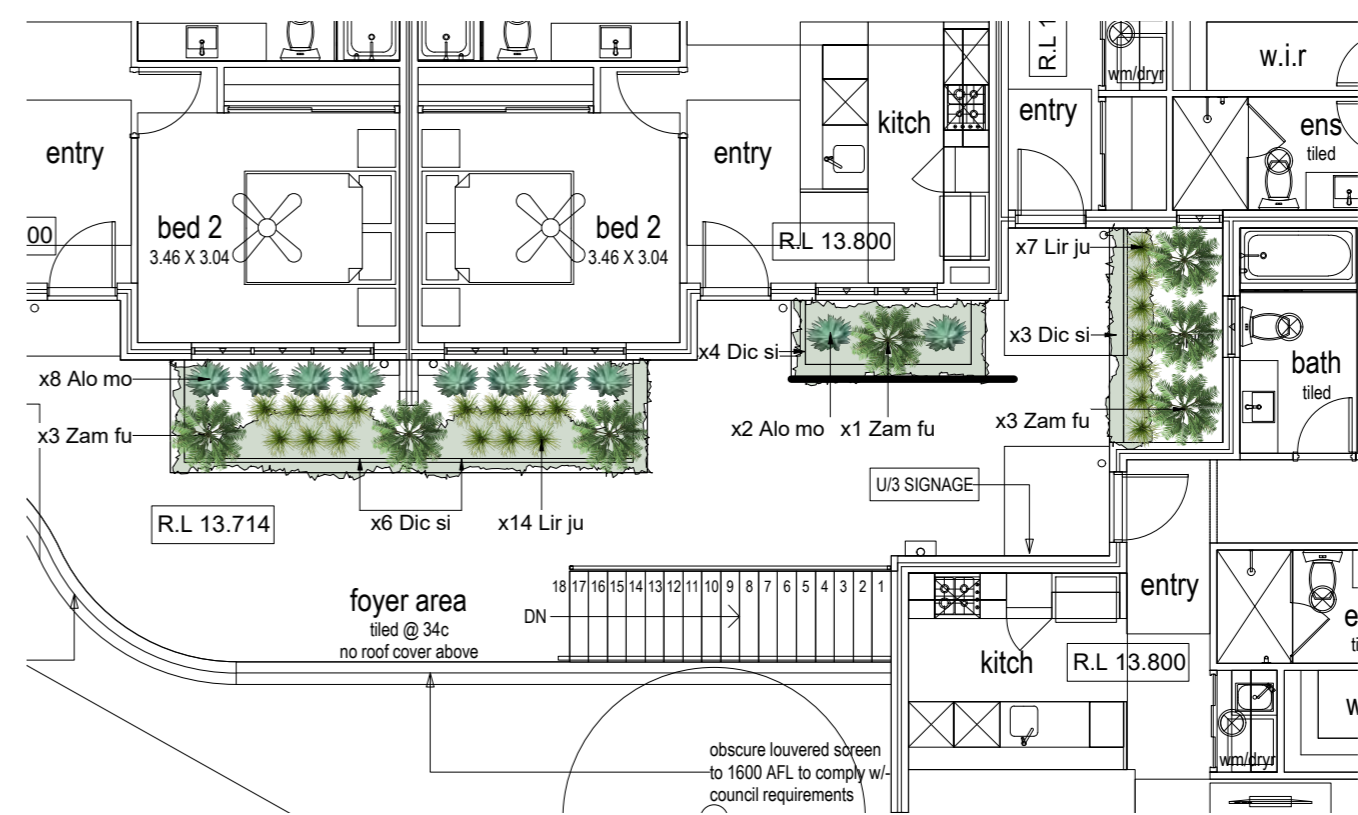
Whitfords Avenue Travelling West within the Future Context



View from Northwood Way within the Current Context



View from Northwood Way within the Future Context



electrical distribution cabinet

1800H rendered brick wall w/- 3 / triple gas meterboxes

750H rendered brick letterbox for U11 to U17

ER OX

e.d.c.

x3 Lom ta

x5 Lom ta



**NOTES:**

- This is not a working drawing & further structural drawings may be required.
- All dimensions & levels to be checked on site prior to construction. If survey has been undertaken all measurements must be taken from building at set point. Some minor adjustments may be required depending on material sizes selected.
- All landscape works are to be in compliance with Council & State Regulations & in accordance with Australian Standards. The client in conjunction with the installing Landscaper, is responsible for obtaining all necessary permits for Council approval.
- All plants are selected by a qualified Landscape Architect, but may be subjected to extreme weather conditions, water deprivation, pests & diseases. Therefore no warranty is offered for the success of a specific planting.
- Landscape specifies that all trees should be not barked, however tree growth can be damaged and warranty will be offered for any future damage to burlap, pots, foliage, or pruning by selected trees.

**CONDITIONS:**

- Notation owns the copyright of this design. Photographs used for promotional & commercial

CITY OF JOONDALUP

# Waste Management Plan

Multi-Dwelling Development  
Lot: 945 (#12) Northwood Way, Kallaroo



Prepared By Mark Anthony Design  
6<sup>th</sup> April 2020 \_ Revision D.

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## 1.0 OBJECTIVE AND BACKGROUND

### 1.1 OBJECTIVE

The CITY OF JOONDALUP requires a WASTE MANAGEMENT PLAN to be included as part of a development application. This WMP has been prepared to fulfil this condition.

The objective of this plan is to ensure that waste management is undertaken effectively, efficiently, and sustainably. Its purpose is to minimise the effects on the community and the environment during both construction and daily operation of the development. The WASTE MANAGEMENT PLAN has also been prepared to meet minimum legislative requirements.

The report addresses both design features and daily operational controls required to ensure that the plan can be implemented effectively and efficiently.

### 1.2 BACKGROUND

The owners have requested MARK ANTHONY DESIGN prepare a WASTE MANAGEMENT PLAN for the proposed Multiple Dwelling Development at LOT: 945 (#12) NORTHWOOD WAY, KALLAROO, the proposed development is located within the City of Joondalup.

The building has been designed by MARK ANTHONY DESIGN and at the time of preparing this WASTE MANAGEMENT PLAN, the proposed development consisted of SEVEN (7) multiple dwellings with 5/2 bed x 2 bath, 1/2 bed x 1 & 1/1 bed x 1 bath units over two (2) levels.

## 2.0 WASTE MANAGEMENT PLAN COMMUNICATION

### 2.1 CONSTRUCTION

As part of the construction phase, a waste management consultant will be appointed where all site and company waste management policies will be explained to sub-contractors during the contract negotiation stage, details on how compliance will be achieved will accompany documentation prepared for the building permit application.

The tendering of the building construction and tender assessment scoring will be weighted in favour of contractors with waste minimisation strategies, compliance will be managed by the project manager and the developer during the construction phase to ensure contractual obligations are met.

### 2.2 OCCUPATION

The occupants of the development will be made aware of this WASTE MANAGEMENT PLAN and their responsibilities, this document will be included in the handover pack given to owners at the time of purchase and/or lease.

Key objectives of the WASTE MANAGEMENT PLAN will be incorporated into the strata management statement to ensure waste management within the development functions effectively in perpetuity. The body corporate will be informed of their obligations within the strata management statement, ensuring the waste management practices described are conveyed to successive owners and/or tenants. This information will be included in any future sale contract and/or rental lease agreement of successive owners and/or tenants.

The body corporate's role also will be to continue to inform occupants of their obligations or any modifications to the waste management system approved by the CITY OF JOONDALUP.

## WASTE MANAGEMENT PLAN

### 3.1 CITY OF JOONDALUP REQUIREMENTS

A summary of the CITY OF JOONDALUP minimum requirements relating to waste storage and collection within this residential buildings are:

- 1 Detailing on waste movement throughout the development.
- 2 Details if bins are to be shared, how and who will responsible for presenting the bins on collection day.
- 3 Details on the estimated waste and recycling volumes generated per unit.
- 4 Details on the bin storage area and is it convenient and functional for the residents.
- 5 Details on where bins will be presentation on the verge.

All relevant conditions are to be addressed in order to comply with the CITY OF JOONDALUP waste, planning and health department requirements.

### 3.2 WASTE DISPOSAL

#### 3.2.1 CONSTRUCTION

During the construction phase a skip bin will be provided for the disposal of waste produced on site and serviced as required by appointed waste management contractor. Some waste management contractors provide on-site sorting and recycling to minimise landfill waste, these waste management contractors will be selected during the construction phase where practical and subcontractors will be responsible for pre-sorting waste products into the appropriate bins where possible to reduce overall construction costs. The sorting will be supervised by the site management and subcontractors will be encouraged to use products that can be reused and/or easily sorted prior to landfill.

Waste water generated during the washing down and/or clean-up of equipment used for brickwork construction and plastering has the potential to be high in PH and therefore be toxic to aquatic flora and fauna, to minimize the impacts associated with the clean-up of such equipment the builder shall ensure that waste waters generated is disposed of in accordance with DEC guidelines this shall be communicated to all personnel during site induction meetings.

Used solvents and paints are to be stored with-in the site shed provided and removed by a licensed contractor as required, all excess lime or cement is to be removed by the contractor who brought it on to site.

All subcontractors will be notified of their responsibility to maintain site cleanliness and adhere to waste management policies during construction, these obligations will be included in all subcontractor contracts.

#### 3.2.2 OCCUPATION

Waste generated by the residences will be separated into different waste types by the occupants within their units and transported by hand to the bin store which is located on the ground floor and placed in the relevant bin type RED for general YELLOW for recycling and GREEN for organic. The building caretaker will responsible for managing the bins within the bin storage area ensuring that one bin is full before the next one is used. The buildings caretaker will also be responsible for the presentation of full bins on collection day to the allocated bin presentation area located on the verge. The CITY OF JOONDALUP waste collection services will empty the bins via trucks where it is removed for processing at their waste disposal site.

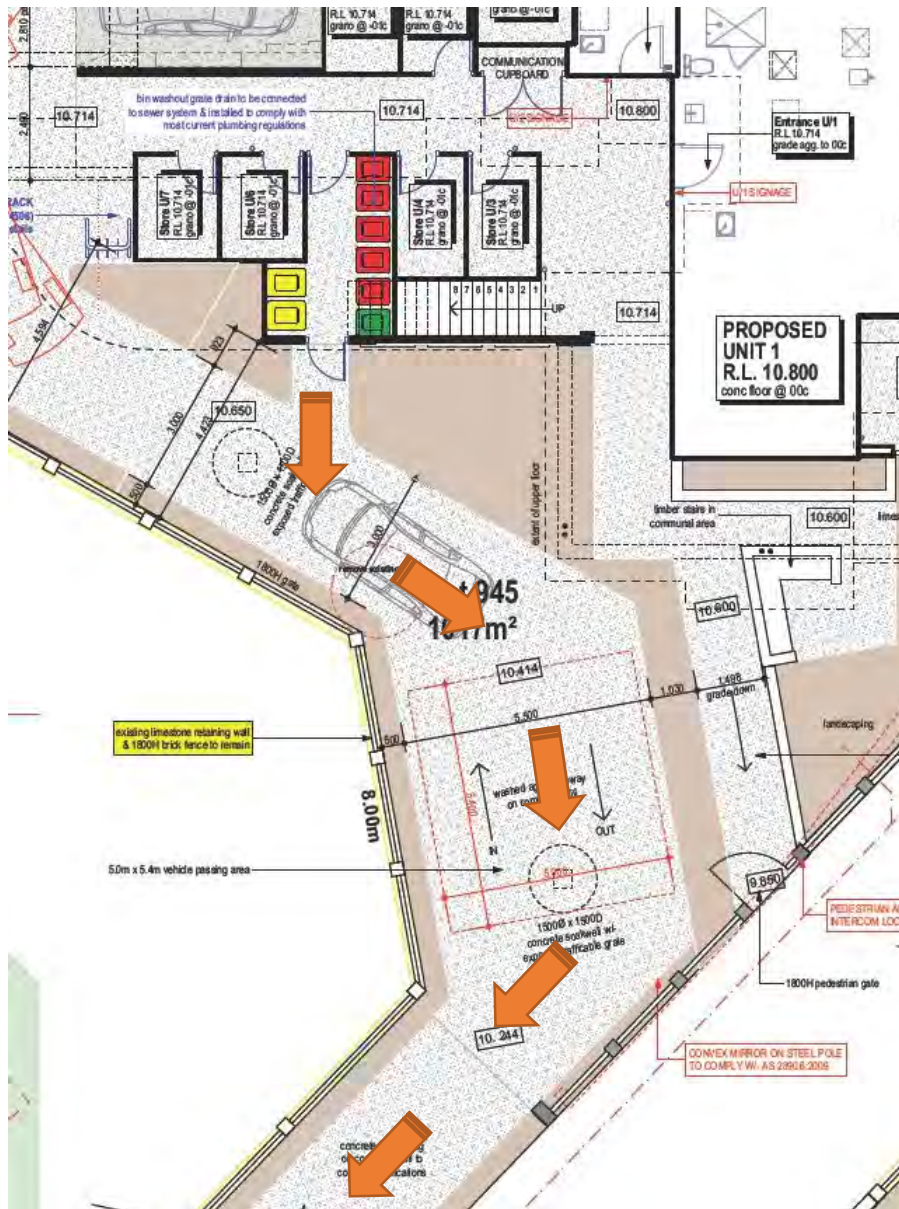
### 3.3 STORAGE AREA REQUIREMENTS

The CITY OF JOONDALUP has indicated that the bin storage areas at this development must be adequate 'to contain all waste and recycled material generated on the premises for at least 1 week.

The following statements and calculations have been made with this condition in mind.

#### 3.3.1 BIN STORAGE AREA

The building enclosed bin storage area is located on the ground floor see drawings below;



The buildings bin store will be predominantly constructed of masonry brickwork have a floor constructed min. 100mm thick concrete slab floor graded to a floor waste drain connected to the building sewer system, the enclosed area will also be mechanically vented to external air to ensure there is no odour build-up. A water hose cock will be installed within to facilitate the wash-out of bins and bin store area with masonry brick walls sealed and rendered in a light colour to facilitate the bin stores maintenance.

The bin store located on the ground floor accessed from the main car parking area which is well lit and ventilated. Buildings caretaker will be responsible for the washing of waste and recycling the containers and also be responsible for the bin store maintenance.

### 3.4 WASTE SOURCES AND GENERATION VOLUMES

This section shows how the development will deal with the following requirements specified by the CITY OF JOONDALUP where an adequate storage space shall be provided to contain all waste and recycled material generated on the premises for at least calendar 1 week with the minimum area shall be at least 1 square meter per residential unit.

#### 3.4.1 RESIDENTIAL WASTE CALCULATIONS

Residential Waste Calculations				
Organic/Food Waste		Approx. General Waste produced	Bin Capacity Required	Bin Capacity Provided
1/ 1B x 1B	80L/week	80L/week		
6/ 2B x 2B or 1Bath	160L/week	960L/week		
0/ 3B x 2B	240L/week	0L/week		
<b>Total</b>		1040/week	4.3 bins @ 240L/week	5 bins @ 240L
Recycled Waste		Approx. Recycled Waste produced		
1/ 1B x 1B	40L/week	40L/week		
6/ 2B x 2B or 1Bath	80L/week	480L/week		
0/ 3Bx2B	120L/week	0L/week		
<b>Total</b>		520L/week	2.1 bins @ 240L/week	3bins @ 240L

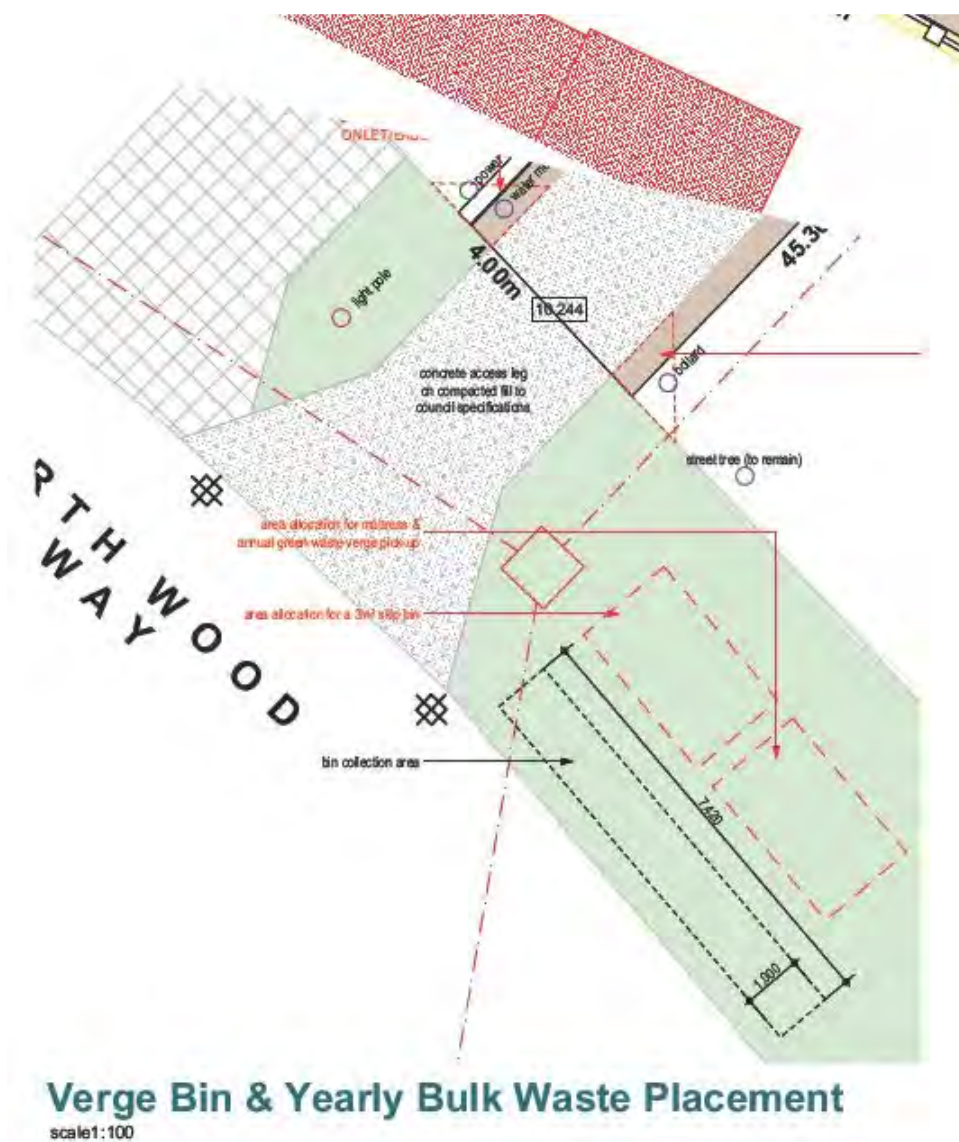
Source: WALGA – Multiple Dwelling Waste Management Appendix 1 Waste Generation Rates

### 3.5 MOVEMENT OF WASTE

The plans below illustrate that a clear path of travel is possible for the building caretaker to take move the full bins from the bins store to verge along NORTHWOOD WAY where bins are to be presented on the sites allocated collection day.

The bin storage area is located well away and not visible from the street and convenient located for the residents to use.

The plans indicated that the verge area where the bin will be presentation is sufficient for (5x 240L RED LID 3x 240L YELLOW RECYCLING & 1x 240L GREEN LID) to be presented, furthermore 2 area's of 3m x 2m in size has been illustrated where a 3m<sup>2</sup> skip bin & mattress and/or annual green waste verge pick-up can be placed for council collection.



## 4.0 WASTE MANAGEMENT PLAN SUMMARY

This WASTE MANagements PLAN demonstrated that there are enough bin capacity and space for the bins to be stored and collected for the building waste generated to be taken off the site effectively, efficiently and sustainably.

The proposed strata management statement will form part of the strata title for this development, this Waste MANAGEMENT PLAN will be incorporated into the document and any changes to the Waste MANAGEMENT PLAN must be approved by the CITY OF JOONDALUP prior to adopting.



# ENVIRONMENTAL ACOUSTIC REPORT

**STATE PLANNING POLICY 5.4  
12 NORTHWOOD WAY, KALLAROO**

01<sup>st</sup> May 2020



For

**MARK ANTHONY DESIGN**

**9/18 Brisbane Street  
PERTH WA 6000**

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Report Version	Author	Notes	Date
Initial Report	Michael Ferguson		09 <sup>th</sup> May 2019
Rev B	Michael Ferguson	Updated drawings	06 <sup>th</sup> April 2020
Rev C	Michael Ferguson	Included comment on driveway noise	22 <sup>nd</sup> April 2020
Rev D	Michael Ferguson	Updated driveway noise comment	01 <sup>st</sup> May 2020



Gabriels Hearne Farrell Pty Ltd is a Member Firm of the Association of Australasian Acoustical Consultants. The report author is a full member of the Australian Acoustical Society.

Disclaimer – The information contained within this report is solely for the use of the client identified on the cover page. The report is based on a specific scope as agreed between

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## 1. INTRODUCTION

The proposed development consists of a two storey 7 unit development, located at Lot 945 (#12) Northwood Way, Kallaroo. Due to the location of this development in close proximity to the Whitfords Ave, the local council have requested that an assessment in accordance with the State Planning Policy 5.4 - "Road and Rail Transport Noise and Freight Considerations in Land Use Planning" requirements. It should be noted that this policy does not consider any ground vibration as "noise", and may require further consideration beyond the recommendations outlined in this report. However ground vibration noise is typically reserved for development in close proximity to rail lines.

This report, based on architectural plans and elevations provided by the client on the 01<sup>st</sup> April 2020, as well as the most recently available Main Roads data. This data shows that Whitfords Ave (at the Endeavour Road traffic signals) receives over approximately 12,000 vehicles per day. The percentage of heavy vehicles is unknown from this data set.

### 1.1 Qualifications of Consultant

The author of this report, Michael Ferguson, has been working for Gabriels Hearne Farrell Pty Ltd (formerly Gabriels Environmental Design Pty Ltd) since the beginning of 2010. He became a full member of the Australian Acoustical Society on the 22<sup>nd</sup> March, 2014. GHF is also a Member Firm of the Association of Australasian Acoustical Consultants.

## 2. DESIGN STANDARDS

### 2.1 Outdoor Noise Criteria

The State Planning Policy 5.4 - "Road and Rail Transport Noise and Freight Considerations in Land Use Planning", establishes criteria in terms of an Outdoor Noise Levels.

Outdoor Noise Level Criteria		
Time of Day	Noise Target	Noise Limit
Day - 16 Hour (6am to 10pm)	$L_{Aeq}(\text{day}) = 55 \text{ dB}$	$L_{Aeq}(\text{day}) = 60 \text{ dB}$
Night - 8 Hour (10pm to 6am)	$L_{Aeq}(\text{night}) = 50 \text{ dB}$	$L_{Aeq}(\text{night}) = 55 \text{ dB}$

Table 02 - SPP 5.4 Outdoor Noise Level Criteria

The above levels are for average external noise levels ( $L_{Aeq}$ ) measured over the whole of the day or night period. The 5 dB difference between the target and limit is referred to as the margin. Where noise levels fall either within this margin or above the Limit, the State Planning Policy 5.4 (SPP) requires the developer to implement noise mitigation measures with a view to achieving the noise target in at least one outdoor living area, if this is not practical, at least within the Margin.

### 2.2 Indoor Noise Criteria

In terms of indoor noise levels, the SPP quotes the acceptable levels for residential buildings as:

- $L_{Aeq}(\text{day})$  40 dB(A) in living and work areas, and
- $L_{Aeq}(\text{night})$  35 dB(A) in bedrooms.

## 3. NOISE LEVEL MEASUREMENTS

### 3.1 Measurement Instrumentation

Noise measurements were carried out using a NATA calibrated Brüel & Kjær 2260 Investigator Sound Level Meter (calibration certificate can be supplied if requested). The equipment was field calibrated before and after measurement and found to be within acceptable tolerances.

The microphone was fitted with a standard 90mm windsock and was set up at a height of 1.2 metres and approximately 4.5m (upper floor) whilst being a distance > 2m from any reflecting surface.

### 3.2 Ambient Noise level Monitoring

The ambient noise level was monitored on the site during the peak traffic period (according to Mainroads traffic volume data) on the 12<sup>th</sup> April, 2019. This monitoring was undertaken to provide a noise level of the vehicles during this particular period of traffic flow. This level can then be interpolated into noise levels for all hours of the day based on their respective traffic volumes.

The monitoring location was approximately 5m from the edge of Whitfords Avenue, in line with the front facing windows proposed. The monitoring location was in the park adjacent to the proposed site due to access restrictions, therefore it should be noted that the ground floor measurements undertaken may be slightly over estimating the final outcome as the boundary fence will provide some screening. This was discussed to have minimal impact on the project as the majority of units and living / bedroom spaces are on the upper floor overlooking any boundary fences proposed.

The measured noise level during peak traffic conditions is as follows:

- $L_{Aeq}$  Ground Level 61.1 dB(A)
- $L_{Aeq}$  Upper Level 64.8 dB(A)

Based on this the relevant noise levels for the hourly traffic data have been calculated as the following:

Calculated Noise Levels based on On-Site Measurements				
Time of Day	North	South	Total	Noise Level
0	7	11	18	47.7
100	7	6	13	46.3
200	3	3	6	43.1
300	8	4	12	46.1
400	13	9	21	48.5
500	86	60	146	56.8
600	200	137	337	60.4
700	337	244	581	62.8
800	505	366	871	64.6
900	376	359	735	63.8
1000	391	374	765	64.0
1100	409	417	826	64.3
1200	389	396	785	64.1
1300	368	378	746	63.9
1400	402	383	785	64.1
1500	484	566	1049	65.4
1600	396	525	920	64.8
1700	377	546	923	64.8
1800	340	442	782	64.1
1900	284	288	572	62.7
2000	178	208	385	61.0
2100	110	151	260	59.3
2200	54	70	123	56.1
2300	30	38	68	53.5

Table 02 - Calculated Noise Level Measurements

Therefore, based on these calculated noise levels, the ambient noise level due to traffic is:

- $L_{Aeq}$  (day) Ground Level 64.0 dB(A)
- $L_{Aeq}$  (night) Ground Level 56.0 dB(A)

In accordance with the SPP 5.4 Guidelines an allowance for the increase in future traffic volumes must also be taken into account. Therefore a +2 dB(A) increase is applied to the above calculated noise levels:

- $L_{Aeq}$  (day) Ground Level 66.0 dB(A)
- $L_{Aeq}$  (night) Ground Level 58.4 dB(A)

The relevant frequency information, interpolated from the on-site noise level measurements is as follows:

Calculated Noise Level Spectrums									
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	L <sub>Aeq</sub>
L <sub>Aeq</sub> (day) - Ground	71.7	71.8	62.5	60.5	62.1	58.8	49.9	40.5	66.0
L <sub>Aeq</sub> (night) - Ground	62.2	58.6	56.8	53.5	54.5	50.0	42.6	36.6	58.0

Table 03 - Calculated Noise Level Measurements

From the above on-site noise level measurements it can be seen that the levels exceed the Noise Limit, particularly for the upper floor. Therefore appropriate measures to ameliorate noise impact must be undertaken. An acoustic assessment has been undertaken and is detailed in the following section of this report.

### 3.3 Notification on Title

Further to above mentioned assessment, the policy under Section 5.7 provides the following information regarding notifications on titles where noise levels are above target levels:

"If the measures outlined previously cannot practicably achieve the target noise levels for new noise-sensitive developments, this should be notified on the certificate of title.

Notifications on certificates of title and/or advice to prospective purchasers advising of the potential noise impacts from major road and rail corridors can be effective in warning people who are sensitive to the potential impacts of transport noise....

Notification should be provided to prospective purchasers and be required as a condition of subdivision (including strata subdivision) for the purposes of noise sensitive development as well as planning approval involving noise-sensitive development, where noise levels are forecast or estimated to exceed the target outdoor noise criteria, regardless of proposed noise attenuation measures. The requirement for notification as a condition of subdivision and the land area over which the notification requirement applies, should be identified in the noise management plan in accordance with the guidelines."

### 3.4 Driveway Noise

Whilst not specifically covered by the SPP 5.4, we have been requested to provide comment on the possible noise emission from vehicles using the driveway. It is our understanding that the existing driveway is in the same location, with the same boundary fence, as the proposed driveway.

Therefore the expected noise level will be very similar to the current noise emissions, albeit slightly more frequent with an increased number of dwellings on the property.

As the proposed carpark is open to the public it is considered a part of the overall 'road network'. Therefore any noise emissions from the braking or propulsions of vehicles are exempt from meeting the Environmental Regulations (Noise) Protection 1997.

## 4. CALCULATIONS AND RESULTS

### 4.1 Outdoor Living Area

As the predicted noise level is above the SPP 5.4 Limit, practical mitigation measures are to be implemented to achieve the noise Target within at least one outdoor area.

Ground floor courtyards are recommended to have solid fencing materials implemented along the boundary of major roads. These fences should be as high as allowed by local council fencing guidelines to form the most effective barrier practicable. We do understand that fences onto street frontages typically have restrictions placed on visual permeability, which inevitably will affect the acoustic mitigation to these courtyards.

It is generally accepted that achieving the noise Target on upper floor balconies is not practical, as this would require full enclosure of the balcony. This has typically been allowed on previous projects, however we still recommend mitigation measures such as:

- Increasing the height of balcony balustrades to improve the acoustic barrier effect; and,
- Acoustic absorption fixed to the underside of balcony eaves /ceiling to reduce energy of noise reflected back towards occupation height.

## 4.2 Indoor Noise Levels

Detailed noise intrusion calculations were undertaken for the proposed development, in particular the bedrooms and main living areas adjacent glazing elements. The building fabric has had the following assumptions in these calculations:

- External walls - Cavity masonry construction
- Roof / Ceiling - Metal Colorbond with minimum 75mm Anticon (or equivalent) / 13mm flush plasterboard ceiling with fibreglass insulation over

### 4.2.1 External Glazing

The results of these calculations has predicted that the following glazing elements are required to meet SPP 5.4 minimum internal noise levels:

- **South Façade**
  - Ground Floor Bed 1 & 2 windows min 6.38mm laminated glass  $R_w$  32
  - First Floor U5, 6 & 7 Living sliding doors min 10.38mm laminated glass  $R_w$  32
  - First Floor U5, 6 & 7 Bedroom sliding doors min 6.38mm laminated glass  $R_w$  30
  - First Floor U5, 6 & 7 Bed awning windows min 6.38mm laminated glass  $R_w$  32
  - First Floor U4 Living awning windows min 10.38mm laminated glass  $R_w$  34
- **East Façade**
  - First Floor U7 Bedroom awning windows min 6.38mm laminated glass  $R_w$  32
- **West Façade**
  - Ground Floor U2 Living sliding doors min 6.38mm laminated glass  $R_w$  30
  - Ground Floor U2 Bed 1 awning windows min 6.38mm laminated glass  $R_w$  32
  - First Floor U4 Living sliding doors min 10.38mm laminated glass  $R_w$  32
  - First Floor U4 Living awning windows min 6.38mm laminated glass  $R_w$  32

The above recommended glass types and locations are also provided in the attached marked-up floor plans. This assessment is based upon the currently proposed glazing sizes. If this changes we must be notified such that we can update our calculations accordingly.

It is critical that this glazing is specified as the minimum  $R_w$  performances specified above for sliding doors and awning windows. These systems must have high quality seals and multi-locking systems where applicable in order to maintain adequate acoustic isolation.

The above represents the minimum requirements to meet the internal noise levels stipulated in the State Planning Policy 5.4. Further to this it is also strongly recommended that any Bedroom glazing overlooking (or with direct line-of-sight) to car parking / driveway areas is upgraded to 10.38mm laminated glass as a minimum (i.e. Bed 1 of Unit 1, Bed 2 of Unit 2, and Bed 1 & 2 of Unit 3).

### 4.2.2 External Doors

External entry doors to be minimum 38mm solid core doors with full perimeter acoustic seals to achieve a minimum performance of  $R_w$  30. Appropriate seals include Raven RP114 bottom seals with Raven RP95 threshold plates, and Raven RP93Si perimeter seals together with Raven RP150 delta seals. If glass panels are incorporated into these door panels we recommend the use of 6.38mm laminated glass as a minimum.

## 4.3 General Construction Requirements

Upgrading of the sound reduction performance of the external windows to reduce the major environmental noise source (traffic noise), is an important element in the overall control of noise through the building envelope. However, with upgraded glazing, noise transmission through the roof / ceiling system etc., must be considered in order to balance the sound reduction through the building envelope.

### 4.3.1 Roofing Details

Metal roof sheeting to be sealed at edges of sheet. This may be achieved with Anticon insulation, or alternatively use a profiled sealant to ensure path for noise into ceilings is fully sealed. Use heavy gauge flashings and profiled sealants where required. All junctions to be air tight.

#### 4.3.2 Box Gutters

Box gutters are to be detailed such that sound reduction performance of the roof ceiling system is not downgraded. Details on this can be provided if required.

#### 4.3.3 Eaves

All the eaves are to be sealed and specially detailed to ensure that the construction does not downgrade the performance of the roof ceiling system. Typically this is achieved by either the installation of fibre cement lined eaves, or by the construction of full height perimeter walls up to the underside of the roof sheeting above (it should also be noted that to satisfy Part F5 of the BCA full height perimeter walls may be required in any case). It is recommended that any eave fibre cement lining is 6mm thick as a minimum. All eave joints to be fully sealed and insulated with fibre glass insulation.

#### 4.3.4 Ceiling Details

To maintain the sound transmission performance of the ceilings, penetrations in the ceiling should not downgrade the acoustic integrity of the construction. Open recessed light fittings are only permitted if the light housing is constructed from an acoustically equivalent material to the surrounding plasterboard ceiling. Surface mounted light fittings are therefore the preferred option.

Where recessed light fittings are used they must be provided with solid metal canister or be fitted with full glass face (no air path through fitting is permitted). Suitable downlights do include most typical LED downlights these days, however this can be confirmed if required.

#### 4.3.5 Kitchen Exhausts

Permanent vented windows in wet areas, must not be used. Wall mounted exhaust fans may only be used in this proposed development if they are capable of being sealed with appropriate materials. Mechanical exhaust systems should incorporate acoustic attenuation treatment such that the building envelope barrier system is maintained. Exhaust fans will require an internally lined cushion head behind the ceiling grill with at least 1.2m of acoustic flexible ductwork attached to the cushion head. This is likely to require usage of an in-line fan.

#### 4.3.6 Air-Conditioning

In implementing the above requirements, mechanical ventilation or air-conditioning must ensure that windows can remain closed in order to achieve the indoor noise standards.

In all bedrooms to be air-conditioned we recommend the use of reverse cycle air-conditioner with inverter type condensing units. Use wall mounted fan-coil units to minimise penetrations through the ceiling. Alternatively locate air-conditioning ducts in bulkheads below the noise barrier ceiling.

Evaporative cooling systems are not recommended as these require windows to be open to operate.

## 5. CONCLUSION

An assessment in accordance with the requirements of the State Planning Policy SPP 5.4 has been carried out for the proposed two storey development located at Lot 945 (#12) Northwood Way, Kallaroo.

Noise level measurements indicate the average ambient noise levels on the site due to traffic noise exceeds the Noise Limit for the daytime and night time period, particularly at the first floor receiver positions.

A detailed acoustic assessment of the noise intrusion potential has been undertaken and with the use of the glazing in high quality residential frames as specified in Section 4.2.1 of this report, compliance with the SPP 5.4 internal noise levels is achieved. Practicable acoustic mitigation strategies for outdoor living areas have been recommended in Section 4.1 of this report.

If you have any queries regarding this information please call the undersigned on 9474 5966.

Regards,

**Michael Ferguson**

Associate Director B.IntArch(Hons) M.A.A.S.



**GABRIELS HEARNE FARRELL PTY LTD**

Member Firm – Association of Australasian Acoustical Consultants

A Unit 3 / 2 Hardy St South Perth WA 6151 P (08) 9474 5966  
E michael@gabriels.net.au W gabriels.net.au M 0423 880 388

Drawing Notes Legend

c	= BRICK COURSE HEIGHT	wc	= WATER CLOSET
h	= WITH	wm	= WASHING MACHINE
dp	= DOWNPIPE	dy	= DRYER
sp	= SPREADER	dw	= DISHWASHER
rw	= RAIN WATER HEAD	s	= SINK
do	= DOOR HEIGHT DRAINING	uo	= UNDER BENCH OVEN
ac	= AIR CONDITIONING	vb	= VANITY BASIN
ma	= MARKER	tr	= TROUGH
sa	= SMOKE ALARM	h	= HAND BASIN
bs	= BEDROOM SOUNDER	tp	= HOT PLATE
td	= THERMAL DETECTOR	fr	= FRIDGE
fw	= FLOOR WASTE	ohc	= OVERHEAD CUPBOARDS
td	= TUN DISH		

GABRIELS HEARNE FARRELL



REQUIRED

6.38mm Laminated Glass Minimum

10.38mm Laminated Glass Minimum

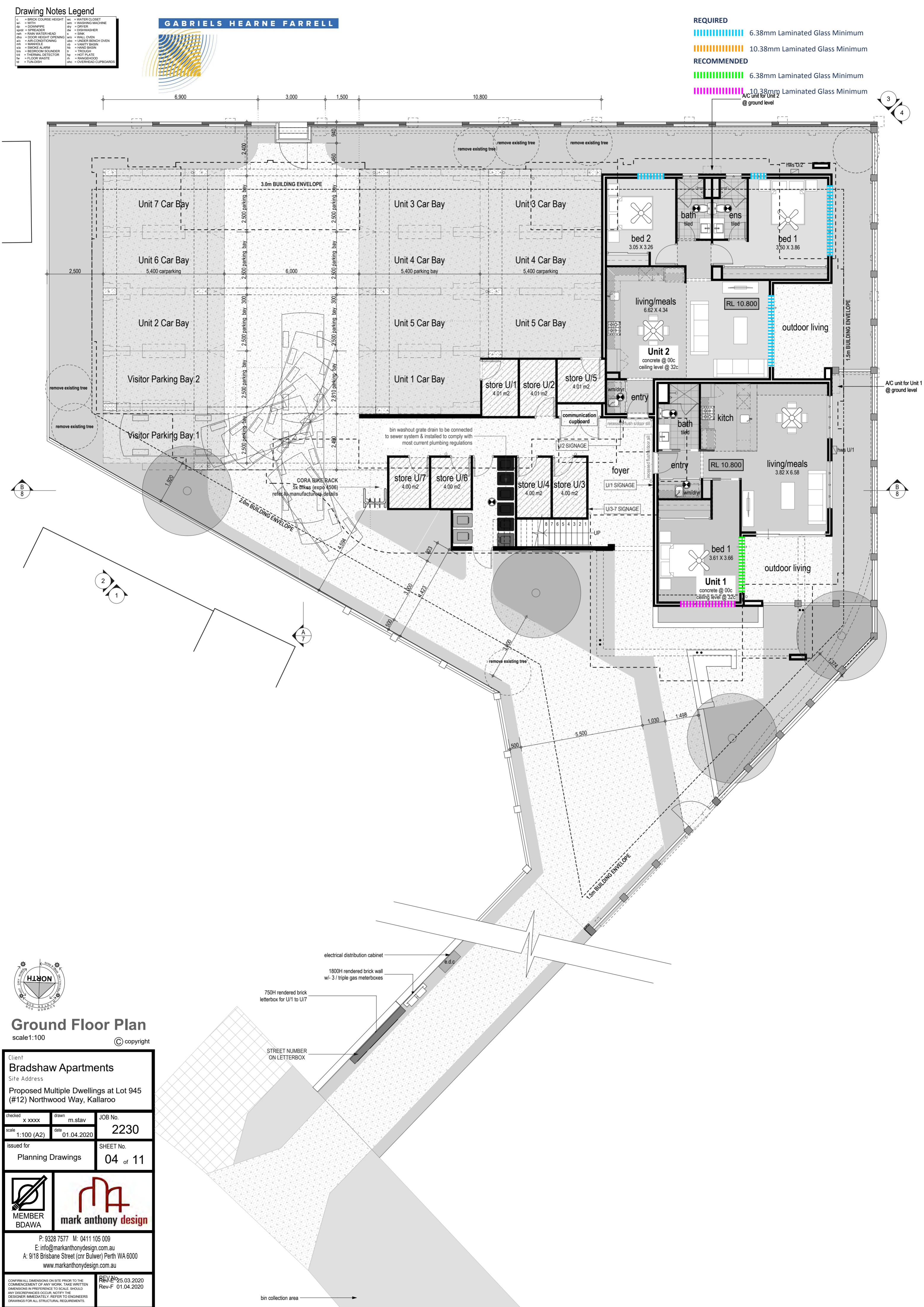
RECOMMENDED

6.38mm Laminated Glass Minimum

10.38mm Laminated Glass Minimum

A/C unit for Unit 2 @ ground level

3  
4



Ground Floor Plan

scale 1:100

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Client  
**Bradshaw Apartments**  
Site Address  
Proposed Multiple Dwellings at Lot 945  
(#12) Northwood Way, Kallaroo

checked  
x xxxxx

drawn  
m.stav


JOB No.  
**2230**

scale  
1:100 (A2)

date  
01.04.2020

SHEET No.  
**04 of 11**

**MEMBER  
BDAWA**

**mark anthony design**

P: 9328 7577 M: 0411 105 009  
E: info@markanthonydesign.com.au  
A: 9/18 Brisbane Street (cnr Buiwer) Perth WA 6000  
www.markanthonydesign.com.au

CONFIRM ALL DIMENSIONS ON SITE PRIOR TO THE  
COMMENCEMENT OF ANY WORK. TAKE WRITTEN  
DIMENSIONS IN PREFERENCE TO SCALE. SHOULD  
ANY DISCREPANCIES OCCUR, NOTIFY THE  
DESIGNER IMMEDIATELY. REFER TO ENGINEERS  
DRAWINGS FOR ALL STRUCTURAL REQUIREMENTS.

REV A 25.03.2020  
Rev-F 01.04.2020

electrical distribution cabinet  
1800H rendered brick wall  
w/ 3 / triple gas meterboxes

750H rendered brick  
letterbox for U/1 to U/7

STREET NUMBER  
ON LETTERBOX

bin collection area

Drawing Notes Legend

c	= BRICK COURSE HEIGHT	wc	= WATER CLOSET
wh	= WITH	wm	= WASHING MACHINE
dp	= DOWNPIPE	dy	= DRYER
sp	= SPREADER	dw	= DISHWASHER
rw	= RAIN WATER HEAD	s	= SINK
dh	= DOOR HEIGHT DIMENSION	uo	= UNDER BENCH OVEN
ac	= AIR CONDITIONING	vb	= VANTY BASIN
ma	= MARBLE	tb	= TROUGH
sa	= SMOKE ALARM	hb	= HAND BASIN
bs	= BEDROOM SOUNDING	tp	= HOT PLATE
td	= THERMAL DETECTOR	rh	= RANGEROOD
fw	= FLOOR WASTE	ohc	= OVERHEAD CUPBOARDS
td	= TUN DISH		

GABRIELS HEARNE FARRELL



REQUIRED

6.38mm Laminated Glass Minimum

10.38mm Laminated Glass Minimum

RECOMMENDED

6.38mm Laminated Glass Minimum


10.38mm Laminated Glass Minimum



Upper Floor Plan

scale 1:100

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Client <b>Bradshaw Apartments</b>		
Site Address Proposed Multiple Dwellings at Lot 945 (#12) Northwood Way, Kallaroo		
checked x xxxxx	drawn m.stav	JOB No. <b>2230</b>
scale 1:100 (A2)	date 01.04.2020	
issued for Planning Drawings		SHEET No. <b>05 of 11</b>
 <b>mark anthony design</b>		
P: 9328 7577 M: 0411 105 009 E: info@markanthonydesign.com.au A: 9/18 Brisbane Street (cnr Buiwer) Perth WA 6000 www.markanthonydesign.com.au		
CONFIRM ALL DIMENSIONS ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK. TAKE WRITTEN DIMENSIONS IN PREFERENCE TO SCALE. SHOULD ANY DISCREPANCIES OCCUR, NOTIFY THE DESIGNER IMMEDIATELY. REFER TO ENGINEERS DRAWINGS FOR ALL STRUCTURAL REQUIREMENTS.		
REV: 05.03.2020 Rev-F: 01.04.2020		

20 April 2020

City of Joondalup  
c/o- Neil Teo  
Dynamic Planning  
[Neil.teo@dynamicplanning.net.au](mailto:Neil.teo@dynamicplanning.net.au)

Dear Mr Teo,

## **NO. 12 NORTHWOOD WAY, KALLAROO PROPOSED MULTIPLE DWELLING DEVELOPMENT (SAT MATTER DR 274 OF 2019)**

This report is submitted to assist with the orders made by the State Administrative Tribunal for the City of Joondalup to reconsider their decision under section 31 of *the State Administrative Tribunal Act 2004*.

At its Ordinary Meeting of Council held on 10 December 2019, the City of Joondalup Council resolved to refuse a proposed multiple dwelling development at No. 12 Northwood Way, Kallaroo for the following reasons:

1. *“the proposal exceeds the maximum plot ratio for the site.”*

Following mediation held on 12 March 2020 the following updated technical reports/plans are provided:

- an updated Acoustic Report
- an updated Landscaping Plans
- an updated Waste Management Plan
- a new Traffic Impact Statement

In addition to the above, updated plans are provided which vary from the previous plans in the following ways:

- Reduction of plot ratio to satisfy the acceptable outcomes of SPP 7.3 Volume 2.
- Increased lot boundary setbacks.
- Increase circulation areas on the ground floor, more spacious lobby.
- Increased separation between the bedroom windows on the foyer area of the first floor.
- Access to Whitfords Avenue.
- Increased landscaping and reconfiguration of the communal area.

The report provides an assessment of the proposed development in accordance with the acceptable outcomes and element objectives of the Residential Design Codes Volume No. 2 to demonstrate that the application should be approved.

## LOCATION & PROPERTY DESCRIPTION

The subject site is located at No. 12 Northwood Way in Kallaroo and is in the form of a green title battleaxe lot. The subject site has a total land area of 1,017.6sqm and has a 4m access leg from Northwood Way. The site's rear boundary is adjacent to Whitfords Avenue for a length of 37m and the site's western boundary is adjacent to Belrose Park.

The site is currently occupied by a single house, which proposed to be demolished as part of this approval and currently has no vehicular or pedestrian access to Whitfords Avenue.



*Figure 1 No. 12 Northwood Way, Kallaroo - Located to the Rear of the Front Property*



*Figure 2 Existing Dwelling Frontage to Whitfords Avenue*

## TOPOGRAPHY

The subject site is relatively flat and does not vary by more than 1.0m. As indicated on the feature survey plan, the existing dwelling sits at a finished floor level of 10.93, with the surround exterior ground levels at approximately 10.8. According to the feature survey the existing dwelling sits at a 'high point', with the footpath level of Northwood Way being approximately 10.2 and the footpath level of Whitfords Avenue being ranging from 9.56 to 10.34, however the dwelling located at No. 14 Northwood Way sits at a level of 11.50.

The proposed floor plans indicate that the ground floor units will sit at a level of 10.8 and the upper floor units at 13.8. The finished floor level of the ground floor units are proposed to be lower than the level of the existing dwelling on the subject and 700mm lower than the floor level of the adjacent dwelling.

## AMENITIES

The site is well positioned in terms of services, amenity, and transport options, and presents an excellent opportunity for redevelopment in the Kallaroo area to provide additional housing options in a high amenity area. The site is approximately 23km from the Perth CBD, 11km from Joondalup, and located opposite Whitfords City Shopping Centre.



*Figure 3 Directly Opposite the Subject Site on Whitfords Avenue*

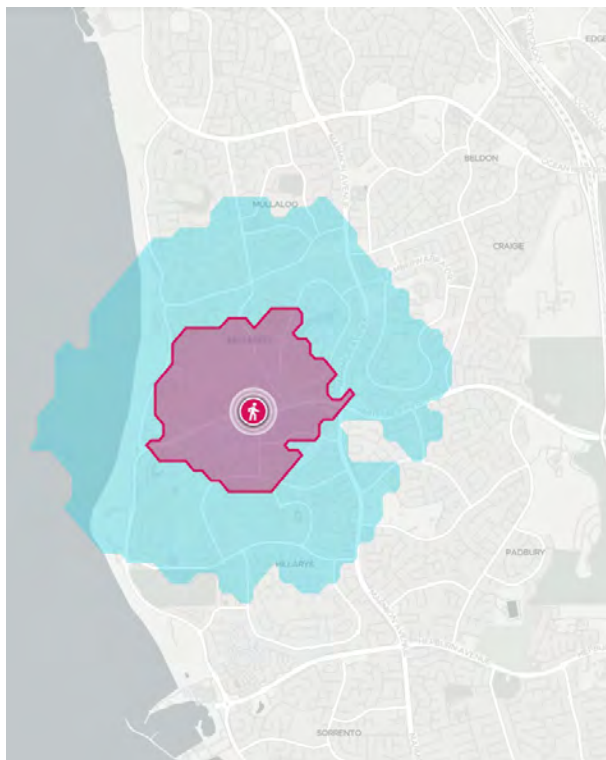
## TRANSPORT

The site fronts Whitfords Avenue — a Distributor Road. Whitfords Avenue interlinks into the wider freeway network, and other distributor roads, within 3km of the site. The site is also near several high frequency (as described in the R-Codes) bus routes including routes 441, 442, 460, 461, 462, and 463. These routes service stops including Whitfords train station and provide easy and convenient services to a wide range of Perth destinations. These routes are accessible from Whitfords Avenue, less than 150m from the site, accessible via a Pedestrian Access Way. There is also convenient access to the railway network, CBD, and other employment centres.

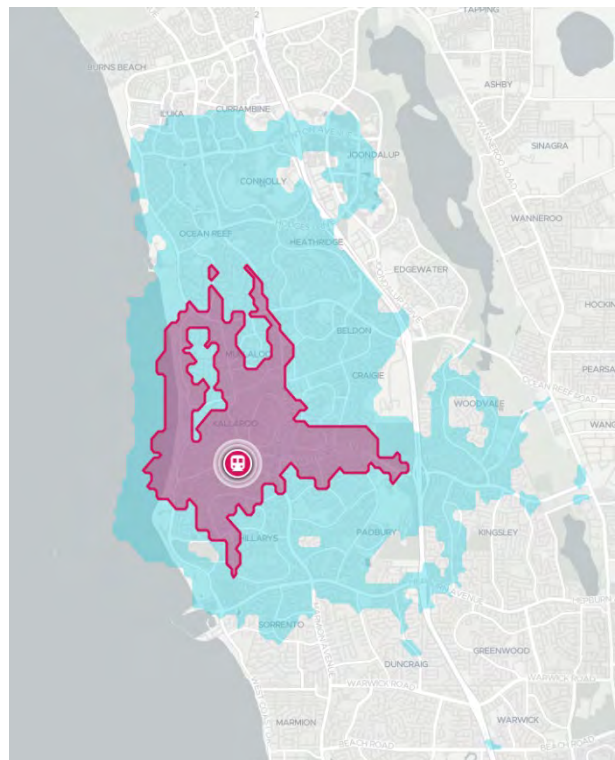
The site has excellent public transport links. Bus routes 441 and 460 both run along Whitfords Avenue with the nearest bus stop located on the road verge just outside the subject site. A summary of the bus routes is provided in the table below, which indicate the availability of public transport options



Figure 4 Transperth Network Map 5 Source: Transperth 2020



15 minute (red) and 30 minute (blue) walking isochrone map. Source: TravelTime Platform 2020



15 minute (red) and 30 minute (blue) public transport isochrone map. Source: TravelTime Platform 2020.

## LOCAL SCHOOLS, PUBLIC OPEN SPACE AND LOCAL AMENITIES

The site is located within proximity of a number of schools inclusive of Springfield Primary School, St Mark's Anglican Community School, Bambara Primary School, Carine Senior Highschool and multiple other primary and high schools.

The lot adjoins Belrose Park, a large park which includes opportunities for passive and active recreation, inclusive of a playground facility. In addition to adjoining a park, the site is within 500 metres of Castlecrag Park, Kiernan Park and Whitfords West Park.

The site is also directly opposite Whitford City Shopping Centre, and 3km from Craigie Leisure Centre and surrounding community services. There are a variety of medical and community services located in the Whitford City activity centre. This precinct provides all amenities required on a day-to-day and weekly basis.

The location is superior with respect to public open space, local services and transport offerings.



*Figure 5 Belrose Park as Viewed from Northwood Way*



*Figure 6 Belrose Park View from Whitfords Avenue with No. 12 Northwood Way, Kallaroo in the Background*



## LOCAL CONTEXT PLAN

12 NORTHWOOD WAY KALLAROO

0 5 10 20 30 40 50  
m

SCALE 1:1,500 @ A4

URBANIST  
TOWN PLANNING

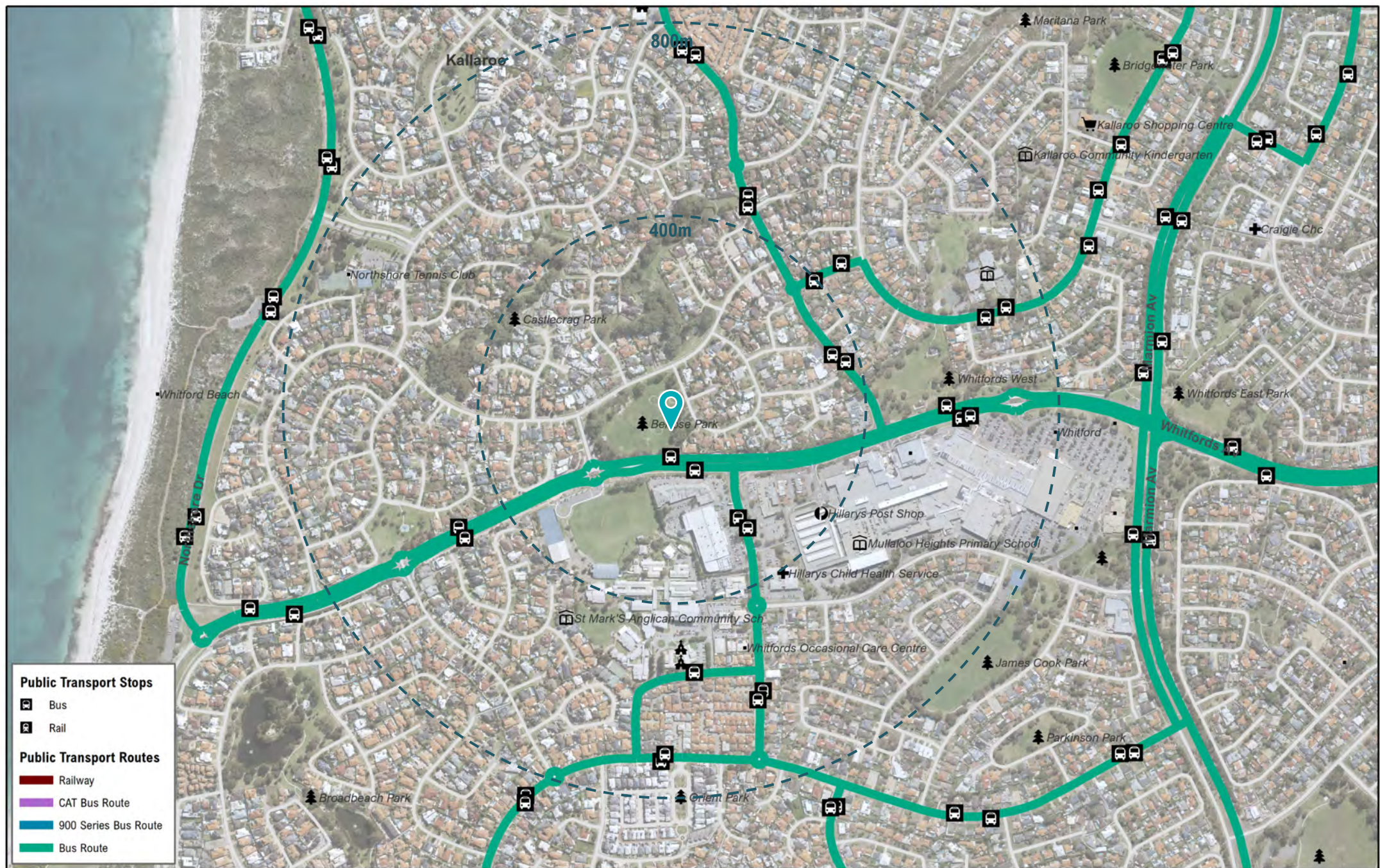
@urbanistaplanning  
Tel: (08) 6444 9171

admin@urbanistaplanning.com.au  
www.urbanistaplanning.com.au

Level 1, 231 Bulwer St,  
Perth, W.A. 6000 Australia

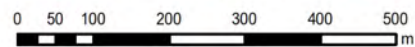
Urbanista Town Planning  
ABN: 47 609 657 098

GDA 1994  
PCG94 & AHD



## WIDER CONTEXT PLAN PUBLIC TRANSPORT

12 NORTHWOOD WAY KALLAROO



SCALE 1:10,000 @ A4

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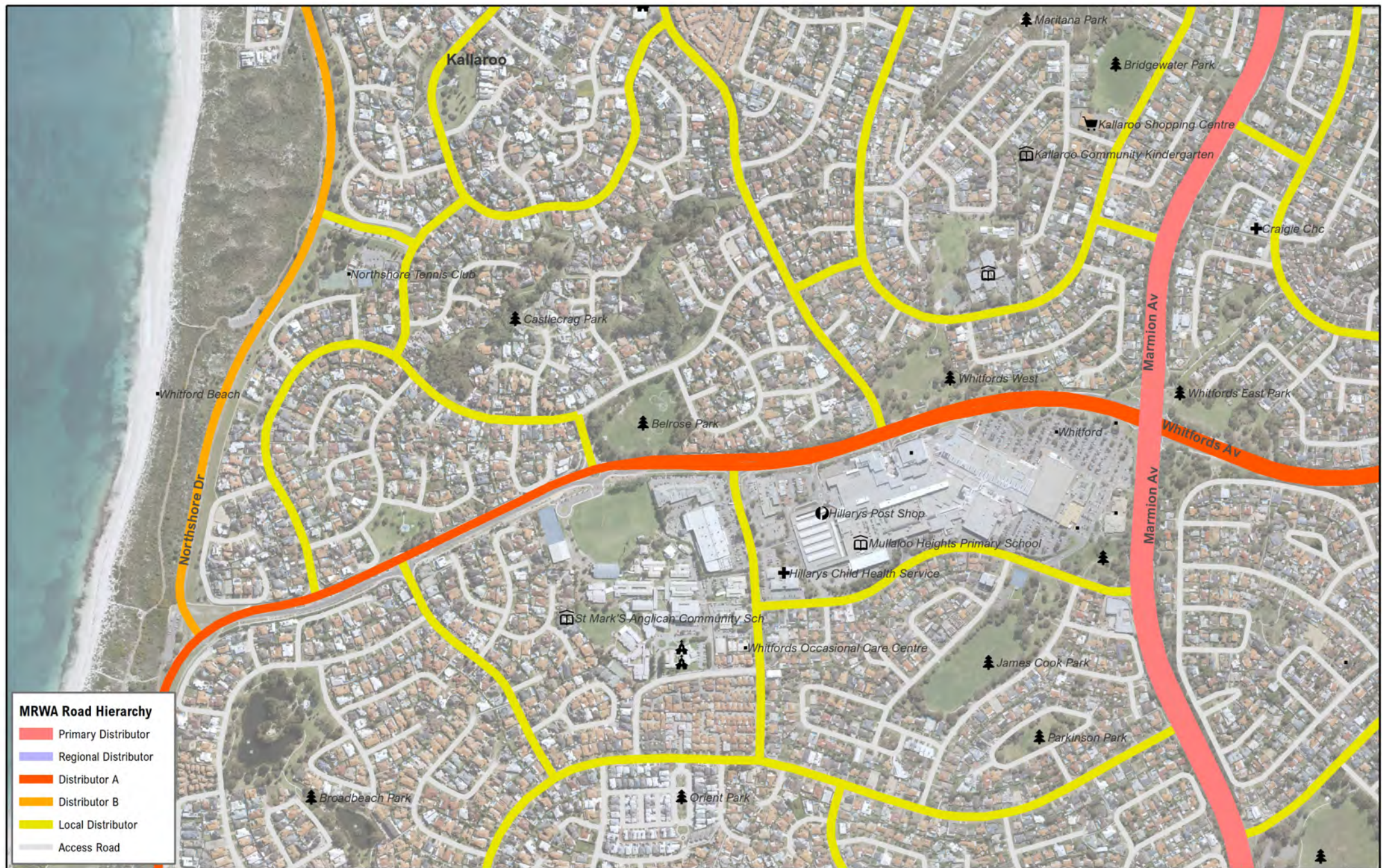
admin@urbanistaplanning.com.au  
www.urbanistaplanning.com.au

Level 1, 231 Bulwer St,  
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## WIDER CONTEXT PLAN ROADS

### 12 NORTHWOOD WAY KALLAROO



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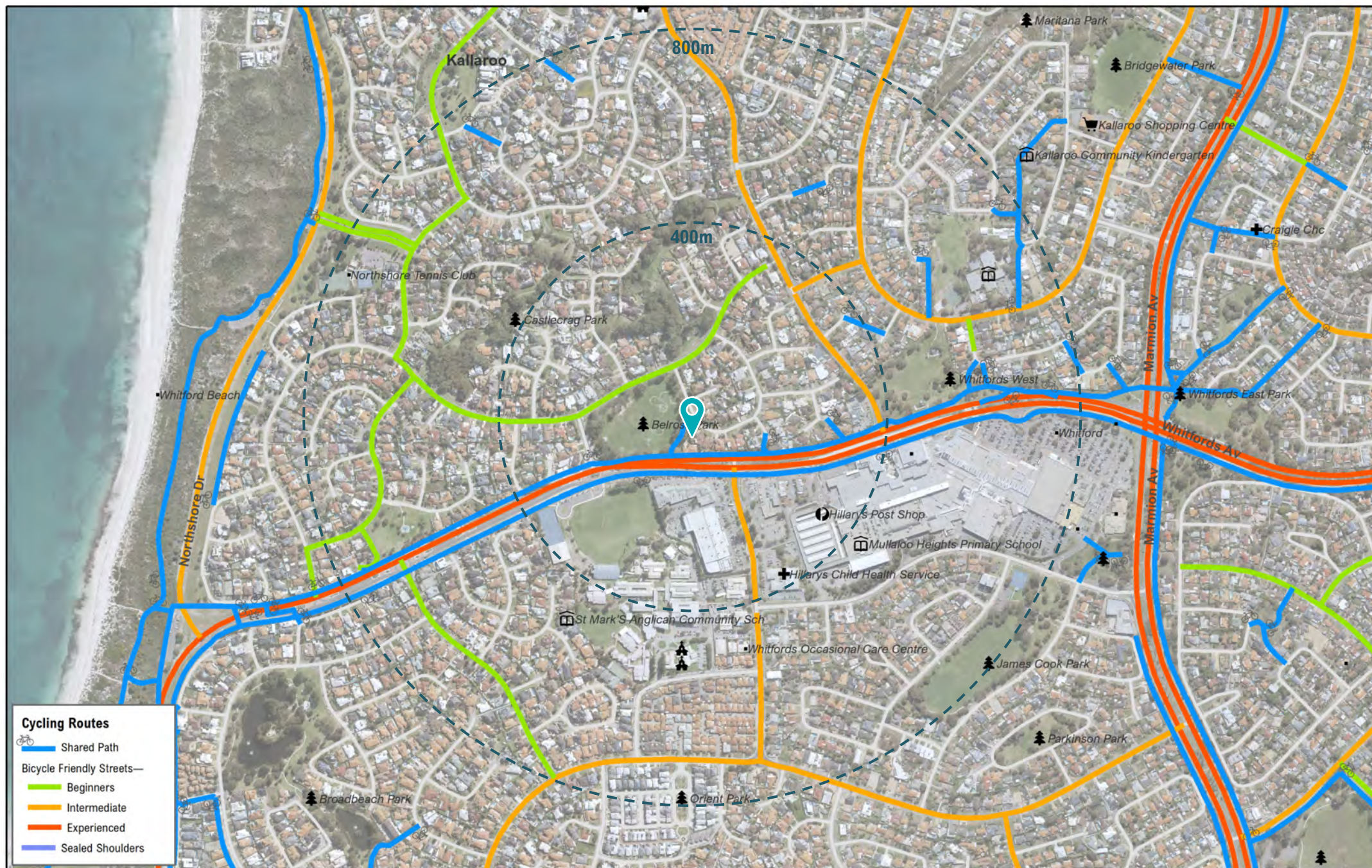
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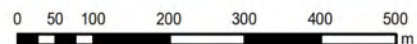
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## WIDER CONTEXT PLAN CYCLING ROUTES

### 12 NORTHWOOD WAY KALLAROO



SCALE 1:10,000 @ A4



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Tel: (08) 6444 9171

admin@urbanistaplanning.com.au  
www.urbanistaplanning.com.au

Level 1, 231 Bulwer St,  
Perth, W.A. 6000 Australia

Urbanista Town Planning  
ABN: 47 609 657 098

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## LAND USE

The subject site is zoned R20/40 in accordance with the City of Joondalup's Local Planning Scheme No. 3. The use of 'multiple dwellings' is a discretionary use in a residential zone in accordance with the Scheme.

The City's officer's as part of their report to Council on 10 December 2019 clearly articulated why the proposed land use is appropriate as following:

*"The discretionary land use permissibility for multiple dwellings applies to every lot in the entire residential zone, across all suburbs of the City. Multiple dwellings are not appropriate to be built on every residential lot in the City and that is why the land use permissibility in the City's scheme requires the exercise of discretion in deciding which lots are appropriate for multiple dwelling development and which are not. The City, as part of Amendment No. 73 to former District Planning Scheme No. 2 (DPS2), recoded certain properties, including the subject site, to allow for the provision of higher density development in certain areas. It was through this action that the City exercised its discretion and decided that multiple dwellings were considered acceptable on certain lots by virtue of the higher density code allocated to them. The relevant standards of the former DPS2 have been transferred through to LPS3.*

*One of the objectives of the residential zone is to provide for a range of housing and a choice of residential densities to meet the needs of the community, which the proposed development, and the Housing Opportunity Areas more broadly, does in a local government area that is characterised primarily by detached, single houses."*

## STREETSCAPE

The existing streetscape of Northwood Way is made up of ageing housing stock represented below with both single and two storey-built form. Newer or modified dwellings in the streetscape are emerging with a two and three storey-built form as they present to the street, illustrated in the imaged below.

The proposed development will have a minimal impact on the streetscape given it is setback in excess of 40 metres. In addition to this, the existing lot is lower than the front lot and also sites within the lowest point of the street's topography.

Two renders have been undertaken as viewed in figures 7 and 8. The first includes the proposed development within its current context and within its future context in the event No. 14 Northwood Way, Kallaroo were to be developed in accordance with the current planning provisions.





*Figure 7 Proposed Development within its Existing Context*



Figure 8 The Proposed Development within its Future Context

## SPP 7.3 VOL. 2 PLANNING ASSESSMENT

This section of the report provides a comprehensive assessment of the proposed development in accordance with SPP7.3 – Residential Design Codes Volume 2.

The following assessment with the relevant element objectives has been prepared. This assessment has been segmented into three parts based on the layout of SPP 7.3 Vol. 2; these are: primary controls; siting the development; and designing the building. This planning assessment demonstrates the suitability of the proposed multiple dwellings and substantiates the design.

### Element Objectives Achievement Summary Table

A summary of the achievement of the element objectives has been provided in the table below. Based on the detailed assessment provided subsequently, the design is considered to achieve all of the applicable element objectives. Design elements 2.8 and 3.1 do not have element objectives. Design elements 4.13 and 4.14 are not applicable to this proposal.

Part 2: Primary Controls		
2.2	Building Height	✓
2.3	Street Setbacks	✓
2.4	Side & Rear Setbacks	✓
2.5	Plot Ratio	✓
2.6	Building Depth	✓

Part 4: Designing the Building		
4.1	Solar & Daylight Access	✓
4.2	Natural Ventilation	✓
4.3	Size & Layout of Dwellings	✓
4.4	Private Open Space & Balconies	✓
4.5	Circulation & Common Spaces	✓

2.7 Building Separation	✓
2.8 Development Incentives for Community Benefit	

Part 3: Siting the Development	
3.1 Site Analysis & Design Response	
3.2 Orientation	✓
3.3 Tree Canopy & Deep Soil Areas	✓
3.4 Communal Open Space	✓
3.5 Visual Privacy	✓
3.6 Public Domain Interface	✓
3.7 Pedestrian Access & Entries	✓
3.8 Vehicle Access	✓
3.9 Car & Bicycle Parking	✓

4.6 Storage	✓
4.7 Managing the Impact of Noise	✓
4.8 Dwelling Mix	✓
4.9 Universal Design	✓
4.10 Façade Design	✓
4.11 Roof Design	✓
4.12 Landscape Design	✓
4.13 Adaptive Reuse	—
4.14 Mixed Use	—
4.15 Energy Efficiency	✓
4.16 Water Management & Conservation	✓
4.17 Waste Management	✓
4.18 Utilities	✓

## Part 2: Primary Controls

Part 2 provides the primary controls that relate to the residential coding of the site. A table detailing how the proposed development achieves the design elements of Part 2 of State Planning Policy 7.3 Volume 2 is provided in the table below.

Element Objectives	Justification and Comment
2.2 Building Height	
02.2.1 The height of development responds to the desired future scale and character of the street and local area, including existing buildings that are unlikely to change.	<p>The maximum building height for development in a Residential R40 area is two storeys and the development complies with this requirement.</p> <p>The proposed development is isolated to a rear lot adjoining a park and Whitfords Avenue. The proposed two storey height is relatively concealed from Northwood Way as illustrated figures 7 and 8 given there is an existing dwelling that primarily conceals the development to Northwood Way. The development is setback approximately 40m from Northwood Way.</p> <p>Along Northwood Way there are existing single houses that are two storey and have a greater impact on Northwood Way due to their minor setback to the street, in comparison to the subject lot. Resulting in the proposed height being appropriate within the context and future context of the locality.</p>

Element Objectives	Justification and Comment
<b>02.2.2</b> The height of buildings within a development responds to changes in topography.	The site is relatively flat, with a minor 1.7m slope from the eastern to western boundary. The finished floor level of the development is consistent with the existing natural ground levels.
<b>02.2.3</b> Development incorporates articulated roof design and/or roof top communal open space where appropriate.	<p>The design does not include roof-top communal areas as this is not required for the development. Notwithstanding, a landscaped ground floor communal space is proposed, which allows future occupants to overlook the adjoining public open space.</p> <p>With respect to the form of the roof, it has been designed with a concealed roof to reduce overall bulk and scale on adjoining properties.</p> <p>Furthermore, the roof area is used to house services such as air-conditioning units and velux skylight systems, with the potential for voltaic solar panels.</p>
<b>02.2.4</b> The height of development recognises the need for daylight and solar access to adjoining and nearby residential development, communal open space and in some cases, public spaces.	<p>The development is designed to achieve ample solar access to apartments and communal spaces, with each apartment possessing access to northern sunlight.</p> <p>The building is carefully designed to respect the need for daylight and solar access to the adjoining properties to the south and west which are also zoned Residential R20/40 but are yet to be developed.</p> <p>A key feature of the design is the significant setbacks to the upper floors of the design along these boundaries to manage the impact of bulk and scale on the adjoining properties.</p>

2.3	Street Setbacks
<b>02.3.1</b> The setback of the development from the street reinforces and/or complements the existing or proposed landscape character of the street.	Given the subject site is located on a rear lot, the development has no immediate impacts on the streetscape (setback in excess of 40m).
<b>02.3.2</b> The street setback provides a clear transition between the public and private realm.	Refer to 02.3.1.

Element Objectives	Justification and Comment
<b>02.3.3</b> The street setback assists in achieving visual privacy to apartments from the street.	Refer to 02.3.1.
<b>02.3.4</b> The setback of the development enables passive surveillance and outlook to the street.	The proposed development has a frontage to Whitfords Avenue and a public open space. The development as purposely been designed to ensure interaction is maintained to these frontages, through the orientation of balconies and habitable spaces. This also provides a high amenity outlook for the future occupants.

2.4	Side and Rear Setbacks
<b>02.4.1</b> Building boundary setbacks provide for adequate separation between neighbouring properties.	<p>In terms of the setbacks, the 'acceptable outcome' for the side setbacks is 2m. Which has been achieved with the exception of minor corners (1.75m and 1.92m) on the first floor located along the northern boundary, and ground floor portions along the western boundary. The rear boundary is Whitfords Avenue, which attracts an 'acceptable outcome' of 3m. The proposed setbacks vary 1.6m – 2.5m.</p> <p>The lot has the ability to be positioned further south and west of the site given it is adjacent to Belrose Park and Whitfords Avenue. As such, some of the setbacks have been reduced to these frontages as the development provides greater interaction with the street and the park, whilst providing separation to the adjoining residential properties.</p> <p>The development provides an interface to two residential properties. The first being No. 14 Northwood Way, Kallaroo whereby the greatest setback proposed to the northern boundary is between 1.75m to 8m. The second property being No. 16 Northwood Way, Kallaroo whereby the proposal shares a boundary for 14 metres along the east elevation. This setback abuts an existing non-active backyard and shed. The proposal provides a setback of 2m to this boundary.</p> <p>The proposed setbacks to the side and rear boundaries provide sufficient separation to adjoining properties, in fact greater separation than the existing housing stock within the locality.</p>

Element Objectives	Justification and Comment
<b>02.4.2</b> Building boundary setbacks are consistent with the existing streetscape pattern or the desired streetscape character.	<p>The existing dwelling on the site has a nil to 5.9m setback to No. 14 Northwood Way, Kallaroo (northern boundary), the proposed setback is greater than this providing greater separation and privacy.</p> <p>The setback to No. 16 Northwood Way, Kallaroo, is reduced compared to the existing single house on the site. However, the setback still provides adequate separation to the adjoining properties shed and backyard.</p> <p>The setbacks to not interrupt the existing streetscape pattern or character as they will be unrecognisable from the street, given the development is setback approximately 40m from the street and is generally concealed by the front dwelling.</p>
<b>02.4.3</b> The setback of development from side and rear boundaries enables retention of existing trees and provision of deep soil areas that reinforce the landscape character of the area, support tree canopy and assist with stormwater management.	<p>The proposed setbacks allow for the planting of trees throughout the site and which reinforces the green aesthetic that is proposed. The development proposes deep soil areas which are greater than the acceptable outcome recommendations of design element 3.3, which relates to tree canopy and deep soil area.</p> <p>There is no vegetation of significance on the site which is to be retained.</p>
<b>02.4.4</b> The setback of development from side and rear boundaries provides a transition between sites with different land uses or intensity of development.	Refer to 02.4.1.

2.5	Plot Ratio
<b>02.5.1</b> The overall bulk and scale of development is appropriate for the existing or planned character of the area.	The proposed plot ratio meets the acceptable outcomes and is consistent with the emerging multiple dwelling development in the locality, as planned through the City's planning framework.

2.6	Building Depth
<b>02.6.1</b> Building depth supports apartment layouts that optimise daylight and solar access and natural ventilation.	The proposed apartments are well planned and propose a building depth which provides sufficient access to daylight and natural ventilation. Each apartment includes an outdoor living area and several major openings which allows for optimal daylight, solar access and natural ventilation to penetrate the building.

Element Objectives	Justification and Comment
<b>02.6.2</b> Articulation of building form to allow adequate access to daylight and natural ventilation where greater building depths are proposed.	<p>The built form has been broken up through the varying setbacks on the upper floors, with generous articulation of the façades. These design choices further improve the visual aesthetic and the ability for access to daylight and natural ventilation within the site and to neighbouring sites.</p> <p>The balconies on the upper floors also help to articulate the building and its appearance. This has the effect of reducing the impact of building bulk and scale to neighbouring properties and the street, while also improving natural daylight and ventilation across the site.</p>
<b>02.6.3</b> Room depths and/or ceiling heights optimise daylight and solar access and natural ventilation.	The development is designed with well-proportioned compliant room depths and ceiling heights to achieve optimal access to daylight, solar access and natural ventilation.

2.7	Building Separation
<b>02.7.1</b> New development supports the desired future streetscape character with spaces between buildings.	<p>The proposed development is two storeys, setback at in excess of 40m from the primary street and therefore consistent with the form of development envisaged for a Residential R20/40 area.</p> <p>It should be noted that the proposed height of the building and its internal and external building setbacks under the 'acceptable outcomes'.</p>
<b>02.7.2</b> Building separation is in proportion to building height.	The scale of the development is in proportion to development envisaged under Volume 2 of the R-Codes and complementary to the adjoining Belrose Park, Whitfords avenue and two adjoining residential properties. Accordingly, the element objective for 02.7.2 is considered to be achieved.
<b>02.7.3</b> Buildings are separated sufficiently to provide for residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook.	<p>The design of the development includes increased landscaping areas with over 21% deep soil area, solar access, and natural ventilation.</p> <p>Residential amenity is improved by north facing balconies and habitable windows that allow for ample sunlight and daylight access into the apartments.</p> <p>In addition, natural ventilation is achieved with all dwellings having a dual aspect. Furthermore, building separation allows for the</p>

Element Objectives	Justification and Comment
	provision of deep soil landscaping around the site that assists with acoustic privacy and visual amenity.
<b>02.7.4</b> Suitable areas are provided for communal and private open space, deep soil areas and landscaping between buildings.	As illustrated in the diagram below, the development provides suitable areas for communal space and deep soil landscaping surrounding the building. Accordingly, the element objective is considered to be achieved.



Figure 9 Landscape Plan

### **Part 3: Siting the Development**

Siting the development provides guidance on the design and configuration of apartment development at a site scale. A table detailing how the proposed development achieves the design elements of Part 3 of State Planning Policy 7.3 Volume 2 is provided in the table:

Element Objectives		Justification and Comment
3.2	Orientation	
<b>03.2.1</b> Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.		<p>The layout of the building is considered to respond to the streetscape and topography attributes and has located the ground floor FFL at a similar height as the adjacent NGL.</p> <p>The site is unique with it's primary vehicle access point being from Northwood Way, but having an interface with Belrose Park and Whitfords Avenue. In addition to this, the northern orientation faces the adjoining residential property to No. 14 Northwood Way.</p> <p>In light of the siting of the lot, it was imperative that the design providing passive surveillance opportunities to Whitfords Avenue and Belrose Park. This was achieved through first floor balconies and habitable rooms, open style fencing to the ground floor apartments to Belrose Park and a pedestrian access to Whitfords Avenue.</p> <p>Given the development required consideration of the non-residential frontages by way of activation, the northern and western boundaries became secondary in terms of activation because they were 'residential interfaces'. As such, the first-floor foyer faces north with associated privacy screening, but this circulation space is quite large enabling separation between habitable room windows and the foyer through planter beds. This allows northern sunlight into the first floor apartments. Whilst still maintaining separation to the adjoining residential properties and activating the non-residential frontages.</p> <p>Each dwelling is at least dual aspect, increasing access to natural sunlight and ventilation.</p> <p>The extent of "overshadow" to neighbouring sites meets acceptable outcome criteria, as the shadow falls directly south onto Whitfords Avenue.</p>

Element Objectives	Justification and Comment
	The design has thoughtfully considered its solar orientation and the siting of the lot and ensured that all units have generous availability of solar access, optimum outlook, ventilation, and function without compromising the ability of neighbouring sites to do the same.
<b>03.2.2</b> Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.	No overshadowing will occur to adjoining residential properties.

3.3	Tree Canopy
<b>03.3.1</b> Site planning maximises retention of existing healthy and appropriate and protects the viability of adjoining trees.	The existing landscaping on the site is minimal and includes some small trees which vary between two to three metres in height and they are proposed to be removed to facilitate the proposed development. These trees are not worthy of retention in accordance with Design WA and the proposed landscaping outcome is far superior in comparison to the existing landscaping.
<b>03.3.2</b> Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from pre-development condition.	<p>The proposed development provides a significant improvement in the pre-development tree canopy. The current site contains a mixture smaller bushes and tree which are not worthy of retention.</p> <p>The proposed landscaping solution inclusive of the planting of medium and small trees, shrubs and ground cover at maturity will significantly increase the amount of landscaping through and across the site when compared with the pre-development condition.</p>
<b>03.3.3</b> Development includes deep soil areas, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.	<p>The development proposes 223.08sqm of deep soil areas across the site. This is well in excess of the acceptable outcome of 10%.</p> <p>The proposal also includes two (2) medium trees and small trees with sufficient rootable soil zone is provided around each tree to enable growth to full canopy at maturity, and stormwater will be directed / and stored where possible for use in garden beds. This is further clarified by the landscape architect on the landscaping plans whereby the medium trees have a root growth area of 2</p>

Element Objectives	Justification and Comment
	<p>metres and can be pruned to accommodate overhanging structures whilst meeting their optimum growth height.</p> <p>All trees are supported by the planting of shrubs and groundcover.</p> <p>The proposal landscaping outcome is superior with 21.93% of deep soil area and is congruent to the adjoining Belrose Park.</p>

3.4	Communal Open Space
<b>03.4.1</b> Provision of quality communal open space that enhances resident amenity and provides opportunities for landscaping, tree retention and deep soil areas.	<p>The proposed communal open space is located opposite Unit 1 on the ground floor. It provides an area of solace that enables occupants to sit and enjoy the view over the adjoining park (Belrose Park). This area is featured around two proposed trees and associated ground cover/shrub planting.</p> <p>Whilst the proposal does not entirely require communal open space as it has direct access to a public open space, it does provide an area for incidental interactions between residents.</p>
<b>03.4.2</b> Communal open space is safe, universally accessible and provides a high level of amenity for residents.	<p>The proposed communal open space is located at-grade on the ground floor on step-free ground. It is safe and universally acceptable, while also providing a high level of amenity for residents due to its position in a landscaped setting.</p>
<b>03.4.3</b> Communal open space is designed and oriented to minimise impacts on the habitable rooms and private open space within the site and of neighbouring properties.	<p>The proposed communal open space is positioned so that it does not impact on the habitable rooms and private open spaces of apartments within the development and on neighbouring properties.</p>

3.5	Visual Privacy
<b>03.5.1</b> The orientation and design of buildings, windows and balconies minimises direct overlooking of habitable rooms and private outdoor living areas within the site and of neighbouring properties, while maintaining daylight and solar access, ventilation and the external outlook of habitable rooms.	<p>As detailed previously, a majority of overlooking is located towards Whitfords Avenue and Belrose Park. There is no direct overlooking into any adjoining residential properties.</p>

Element Objectives		Justification and Comment
3.6	Public Domain Interface	
03.6.1	The transition between the private and public domain enhances the privacy and safety of residents.	The transition between the public and private realm is clearly delineated. Defensible space responding to CPTED principles is provided. This is further emphasised with the only interaction to the primary street being the vehicle access leg.
03.6.2	Street facing development and landscape design retains and enhances the amenity and safety of the adjoining public domain, including the provision of shade.	Not applicable.

3.7	Pedestrian Access and Entries	
03.7.1	Entries and pathways are universally accessible, easy to identify and safe for residents and visitors.	<p>The primary access to the site is from Northwood Way, which is clearly defined through an address sign located on the proposed letterboxes clearly illustrating the address. Upon the approach of the multiple dwellings, the ground floor foyer is large and defined by the proposed framing of the entry (architectural element) and landscaping design. Furthermore, the proposed will include internal signage for the ease of visitors.</p> <p>The site also includes access to Whitfords Avenue and Belrose Park. The access to Whitfords Avenue is provided to enable easy access for residents and visitors to access the site from Whitfords Avenue after utilising local offerings or public transport. The access to Belrose Park to provide easy access to utilise the public open space for recreation purposes.</p> <p>The pedestrian circulation areas internal and external will be provided with a lighting treatment to ensure safe access day and night, without excessive light-spill through the use of sensor lights, and ankle height floor illumination lights.</p> <p>The pedestrian entries are provided with opportunity for passive surveillance through the siting of windows and living areas oriented toward the street. CCTV may be installed as required.</p>
03.7.2	Entries to the development connect to and address the public domain with an attractive street presence.	The design provides a clear and connected interface between the public domain and the street. The design utilises a variety of materials and colours, in combination with landscaping to provide an attractive street presence. These materials and colours include

Element Objectives	Justification and Comment
	brick, timber, and contrasting render. The entry is clearly legible without dominating the streetscape, consistent with the character of the area.

3.8	Vehicle Access
<b>03.8.1</b> Vehicle access points are designed and located to provide safe access and egress for vehicles and to avoid conflict with pedestrians, cyclists and other vehicles.	<p>Only a one single width crossover is proposed. A separate pedestrian entry is provided. Convex deflection mirrors will increase visibility around corners. There are limited blind corners. Traffic volumes are not expected to be significant, and the chance for vehicle conflict is expected to be minimal. The manoeuvring design does not allow for high-speed traffic, which reduces the chance for vehicle conflict.</p> <p>A Traffic Impact Statement is provided which details the proposal is satisfactory.</p>
<b>03.8.2</b> Vehicle access points are designed and located to reduce visual impact on the streetscape.	The vehicle access point is existing and is permitted as of right.

3.9	Car and Bicycle Parking
<b>03.9.1</b> Parking and facilities are provided for cyclists and other modes of transport.	<p>The site is in a location A area (less than 250m from transit stop of a high-frequency route (definition as per R-Codes and not per Transperth terminology)).</p> <p>It is considered that the facilities provided for bicycles and other modes of transport are suitable for the proposed development. The individual apartments provide suitable end-of-trip facilities for cyclists and pedestrians. Dedicated or separate facilities are not appropriate given no mixed-use / commercial is proposed.</p> <p>The acceptable outcome recommendation for bicycle parking is:</p> <ul style="list-style-type: none"> <li>• 0.5 resident bicycle parking spaces per dwelling (3.5 spaces); and 1 bicycle parking space per 10 dwellings for visitors (1.0 spaces).</li> <li>• 4.5 spaces in total.</li> </ul> <p>The proposed bicycle parking consists of five dedicated spaces, with additional space within each resident's dwelling store to accommodate the parking of an additional bicycle.</p>

Element Objectives	Justification and Comment
<p><b>03.9.2</b> Car parking provision is appropriate to the location, with reduced provision possible in areas that are highly walkable and/or have good public transport or cycle networks and/or are close to employment centres.</p>	<p>As discussed above the site is located within a Location A area.</p> <p>The acceptable outcome recommendation for car parking is:</p> <ul style="list-style-type: none"> <li>• 0 bays for studio dwellings (0 spaces);</li> <li>• 0.75 bays per single bedroom dwellings (0.75 spaces); and</li> <li>• 1 bay per multi-bedroom dwelling (9 spaces); with</li> <li>• 1 bay per four dwellings up to 12 dwellings for visitor car parking (2.5 spaces)</li> <li>• 9 spaces in total</li> </ul> <p>The development proposes 12 on-site car parking spaces for residents, and three on-site visitor car parking spaces.</p>
<p><b>03.9.3</b> Car parking is designed to be safe and accessible.</p>	<p>The proposed car parking design is considered to be safe and accessible and will be designed to meet Australian Standards AS2890.1, as demonstrated in the Transport Impact Statement prepared by KCTT for this proposal.</p> <p>KC Traffic and Transport (KCTT), traffic and engineering consultants, prepared a detailed Transport Impact Statement for the proposed development. KCTT found that the <u>peak</u> motor vehicle trip generation rate of the development would be 5 vehicles per hour (vph). A summary of the report is as follows:</p> <ul style="list-style-type: none"> <li>• <i>Northwood Way is classified as Access Road under MRWA classification and the maximum desirable traffic volume 3,000 vehicles per day. Currently the estimated traffic on Northwood Way is significantly under the maximum volume, therefore, the added traffic volume from the proposed development would not impact the surrounding road network.</i></li> <li>• <i>The proposed driveway to Northwood Way is a domestic Category 1 driveway serving less than 25 parking bays from a local road. The width of crossover and driveway is 3m. A passing opportunity of 5.5m is provided at 27m from subject lot boundary and 14m from the proposed parking area in accordance with AS2890.1:2004.</i></li> <li>• <i>Moreover, given the very low traffic expected (6 VPH) and homogenous land-use (i.e. the vehicles are likely to all leave or all enter the development in peak hours), KCTT believe that no delays or queuing can be expected on Northwood Way.</i></li> </ul>

Element Objectives	Justification and Comment
	<ul style="list-style-type: none"> <li><i>In the unlikely case vehicles do need to pass by on the driveway, convex mirror has been provided for additional safety. Vehicles would have sufficient time to see the oncoming vehicle and wait in the provided widening.</i></li> <li><i>The sight lines at the crossover will be preserved. There will be no obstructions to sight lines from the crossover to Northwood Way oncoming traffic. It should be noted that this is an existing crossover and that there are no crash incidents in last 5 years in the vicinity of the subject site. Therefore, no safety issues are expected upon completion of the proposed development.</i></li> </ul> <p>Given the low volumes of traffic a basic linear layout of the driveway a single width driveway and crossover has been proposed which reduces the presence and dominance of the car parking to the streetscape. There are not expected to be any issues with regard to vehicle conflict, given these traffic volumes and that clear sight lines are maintained from the street into the car parking area and vice-versa.</p> <p>Access to the apartments from the car parking area will be possible via the stairs from the car parking area. A separate pedestrian entry is also proposed.</p>
<p><b>03.9.4</b> The design and location of car parking minimises negative visual and environmental impacts on amenity and the streetscape.</p>	<p>The proposed development achieves this element objective and the related acceptable outcomes for design and location of car parking. All on-site car parking is located behind the street setback area, and is not readily visible from the street.</p>

## Part 4: Designing the Building

Designing the building provides Element Objectives, Acceptable Outcomes and Design Guidance for building form, layout, functionality, landscape design, environmental performance and residential amenity. A table detailing how the proposed development achieves the design elements of Part 4 of State Planning Policy 7.3 Volume 2 is provided in the table below:

Element Objectives		Justification and Comment
4.1	Solar and Daylight Access	
04.1.1	In climate zones 4, 5 and 6: the development is sited and designed to optimise the number of dwellings receiving winter sunlight to private open space and via windows to habitable rooms.	<p>The site is located in climate zone 5. All individual dwellings are capable of receiving direct solar access to habitable rooms. Each habitable room has a light-permeable window for access to natural daylight.</p> <p>The design has allows each apartment to have dual aspect providing greater access to solar. The ability of apartments to access sunlight from a northern aspect is maximised, based on the context of the subject site.</p>
04.1.2	Windows are designed and positioned to optimise daylight access for habitable rooms.	All apartments have access to multiple aspects to enable improved all year round use. Full height glazing is proposed to the balcony / living windows to improve sunlight access. All habitable rooms are provided with windows to allow for improved daylight access, while acknowledging the visual privacy considerations of the locality.
04.1.3	<p>The development incorporates shading and glare control to minimise heat gain and glare:</p> <ul style="list-style-type: none"> <li>– from mid-spring to autumn in climate zones 4, 5 and 6 AND</li> <li>– year-round in climate zones 1 and 3.</li> </ul>	<p>The design includes shading devices, namely associated with the balconies, to help in the control of excess heat gain during the summer months. Living rooms and other rooms are recessed behind to further help control heat gain and heat loss.</p> <p>Other measures include the proposed landscaping treatment and proposed trees which will provide a canopy to help reduce heat loads.</p> <p>Materials selection also plays an important part in reducing the need for mechanical heating and cooling. The lighter coloured materials are considered to improve the reflection of heat.</p>

Element Objectives		Justification and Comment
4.2	Natural Ventilation	
04.2.1	Development maximises the number of apartments with natural ventilation.	<p>Every apartment is provided with a means of natural ventilation through openable windows and doors, and across the articulated façade and through the split-block apartment built form.</p> <p>Each apartment will be provided with a ceiling fan to improve air circulation, while the window design and orientation will help reduce latent heat gain and improve air circulation effectiveness and outcomes.</p> <p>Every living room has openable windows and doors to improve air circulation, and all apartments have a means of “cross-ventilation” exceeding the 60% of apartments acceptable outcomes criteria.</p>
04.2.2	Individual dwellings are designed to optimise natural ventilation of habitable rooms.	All apartments include large sliding doors and other openings associated with open plan living rooms which again to improve the ability to access natural ventilation and reduce the reliance on mechanical heating or cooling means. This is supported by design features as described above.
04.2.3	Single aspect apartments are designed to maximise and benefit from natural ventilation.	<i>No single aspect apartments are proposed.</i>

4.3	Size and Layout of Dwellings	
04.3.1	The internal size and layout of dwellings is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size.	<p>All dwellings exceed the size recommendations of the acceptable outcomes (being 47sqm for 1-bed, 1-bath; 67sqm for 2-bed, 1-bath, 72sqm for 2-bed, 2-bath; and 75sqm for Unit 02 given the extra toilet). All individual rooms are consistent with the acceptable outcome sizing recommendations.</p> <p>The internal size and layouts of the dwellings are functional and provides the ability for reuse in the future to suit and be customised to different residents. The size and layout of each apartment is considered appropriate for the expected household size. The apartment composition is for a mix of single-bedroom and two bedroom apartments.</p>

Element Objectives	Justification and Comment
<b>04.3.2</b> Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good natural ventilation and daylight access.	The proposed room dimensions and proportions facilitate good access to natural ventilation and daylight in combination with the location of windows and other openings to each apartment. Each individual floor is 2.7m high. Further detail is provided on the building floor plans.

4.4	Private Open Space and Balconies
<b>04.4.1</b> Dwellings have good access to appropriately sized private open space that enhances residential amenity.	All apartments have good access to an appropriately size private open space. All private open space meets the minimum dimension and area requirements of the respective acceptable outcomes.
<b>04.4.2</b> Private open space is sited, oriented and designed to enhance liveability for residents.	<p>All apartments have been provided with large areas of private open space provided via either balconies or terraces. The design and orientation of these balconies and terraces. Each open space benefits from either an aspect of Whitfords Avenue including the opposite commercial precinct and public open space.</p> <p>The private open space is sited and provided to enhance the liveability for residents. All private open space is capable of receiving direct sun. All private open space is also directly accessible from a room of the apartment and securable.</p>
<b>04.4.3</b> Private open space and balconies are integrated into the overall architectural form and detail of the building.	<p>The proposed development design thoughtfully integrates the balconies and ground floor private open space into the building design. The private open space is framed be the façade treatment which complements the overall design and aesthetic.</p> <p>Overall, the private open space is thoroughly integrated into the design of the building providing a thoughtful and functional design. No private open space includes external fixtures such as air conditioner condensers or other servicing infrastructure.</p>

4.5	Circulation and Common Spaces
<b>04.5.1</b> Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.	<p>Circulation corridors and walkways are all at least 1.5m in width, this includes lobbies and external circulation spaces, which have all been designed with universal access considerations in mind.</p> <p>All circulation areas are of sufficient dimension and design to allow for people with mobility impairments to use them. Direct,</p>

Element Objectives	Justification and Comment
	<p>convenient, and safe pedestrian access is provided for all residents and visitors both from the street, and from vehicle parking areas to each proposed apartment.</p> <p>Each apartment is proposed to be securable in accordance with the requirements of the National Construction Code. The impact of noise from circulation areas is considered to be minimal, as there are landscaping buffers or solid walls with minor openings adjoining the circulation areas.</p>
<b>04.5.2</b> Circulation and common spaces are attractive, have good amenity and support opportunities for social interaction between residents.	<p>The circulation spaces, including external walkways, are generously proportioned, and will be constructed of hardy materials requiring minimal ongoing maintenance.</p> <p>The proposed communal open space will encourage social interaction between residents.</p>

4.6	Storage
<b>04.6.1</b> Well-designed, functional and conveniently located storage is provided for each dwelling	<p>7 store-rooms are proposed which consist of nine located together near the lift on the ground floor, and two co-located with apartments.</p> <p>The store rooms meet the acceptable outcomes.</p>

4.7	Managing the Impact of Noise
<b>04.7.1</b> The siting and layout of development minimises the impact of external noise sources and provides appropriate acoustic privacy to dwellings and on-site open space.	<p>All dwellings will meet the requirements of the National Construction Code. The location of mechanical building services and vehicle car parking and manoeuvring areas are located away from and screened from sensitive residential apartment uses, and from adjoining sites.</p>
<b>04.7.2</b> Acoustic treatments are used to reduce sound transfer within and between dwellings and to reduce noise transmission from external noise sources.	<p>In addition to the above, noise mitigation treatments will include the use of fire-proof dividing walls and window / door orientation and glazing which will further contribute to reducing the impact of noise between apartments and to / from neighbouring sites.</p> <p>An acoustic report has been provided and accompanied with this letter, whereby the development satisfies all acoustic provisions.</p>

Element Objectives		Justification and Comment
4.8	Dwelling Mix	
<p><b>04.8.1</b> A range of dwelling types, sizes and configurations is provided that caters for diverse household types and changing community demographics.</p>		<p>A mix of single-bedroom and two-bedroom apartments has been proposed, in various configurations. The apartment composition is as follows:</p> <ul style="list-style-type: none"> <li>• 1x 1-bed, 1-bath</li> <li>• 1x 2-bed, 1-bath</li> <li>• 5x 2-bed, 2-bath</li> </ul> <p>The housing typology and layout is considered appropriate for the location. It provides a range of typologies catering to different needs.</p> <p>Furthermore, a number of the apartments will be accommodating family members of the owners, which has influenced the design.</p>

4.9	Universal Design	
<p><b>04.9.1</b> Development includes dwellings with universal design features providing dwelling options for people living with disabilities or limited mobility and/or to facilitate ageing in place.</p>		<p>All apartments on the ground floor are step-free and generously proportioned (reference to plot ratio) to allow for ease of manoeuvring by the aged, and those with a mobility impairment.</p>

4.10	Façade Design	
<p><b>04.10.1</b> Building façades incorporate proportions, materials and design elements that respect and reference the character of the local area.</p>		<p>The built form includes a mixture of colours and materials from two tone render, feature panelling, alternative fencing, black aluminium windows and feature balustrading.</p> <p>The built form references materials evident in the local area and responds to an emerging character following rezoning.</p> <p>The building façade design helps give the apartments a contemporary grounded (human-scale) feel, and character responsive appearance. The façade includes articulation and scaling elements to improve its appearance Whitfords Avenue and Belrose Park.</p> <p>The proposed landscaping solution also complements the building and provides a softening effect to the ground floor which complements Belrose Park.</p>

Element Objectives	Justification and Comment
	<p>The proposed design achieves the acceptable outcomes as it provides façade treatment that includes:</p> <ul style="list-style-type: none"> <li>• a site responsive mixed materials and colours palette;</li> <li>• building articulation and scaling;</li> <li>• clearly defined and legible building entries;</li> <li>• vertical and horizontal defining design elements;</li> <li>• a complementary landscaping treatment; and</li> <li>• concealed building services.</li> </ul>
<p><b>04.10.2</b> Building façades express internal functions and provide visual interest when viewed from the public realm.</p>	<p>The proposed design provides a variety of responsive materials, colours, and other design elements to the building façade, as discussed previously.</p> <p>The built form is also broken up by the articulation and recessing provided throughout.</p> <p>Together this façade treatment provides visual interest for the development when viewed from the street. The building communicates and interfaces with the street providing a clear hierarchy and expression of the building's function and purpose. This is supported by the proposed communal open space.</p>

Element Objectives

Justification and Comment



Figure 10 The Proposed Design from Belrose Park

4.11	Roof Design	
<b>04.11.1</b>	Roof forms are well integrated into the building design and respond positively to the street.	A concealed roof design is proposed. The concealed roof design will reduce the impact and appearance of bulk to the street. The proposed roof design is consistent with and responsive to the current established character of the area.
<b>04.11.2</b>	Where possible, roof spaces are utilised to add open space, amenity, solar energy generation or other benefits to the development.	<p>The proposed roof form provides opportunity for photovoltaic cells for electricity generation. The concealed roof form reduces the developments bulk and scale on it's surrounds.</p> <p>The roof form respects the privacy neighbours, the site's context, and allows these building utilities to be provided without impacting on the amenity of the apartments. It is not practicable for an additional roof function to be incorporated into the roof design, given the scale of the proposed development and the functional benefit which could be offered.</p>
4.12	Landscape Design	
<b>04.12.1</b>	Landscape design enhances streetscape and pedestrian amenity; improves the visual appeal and comfort of	The proposed landscaping includes 21% deep soil area, with the planting of small and medium trees. It is considered that the proposed landscaping will improve the existing site condition.

Element Objectives	Justification and Comment
open space areas; and provides an attractive outlook for habitable rooms.	<p>The landscaping has been designed by a landscape architect and the plans have been provided with this letter. The intent of the landscaping is to provide a transition from Belrose Park and provide an aesthetically pleasing development.</p> <p>The landscaping design increases onsite and offsite amenity.</p>
<b>04.12.2</b> Plant selection is appropriate to the orientation, exposure and site conditions and is suitable for the adjoining uses.	The proposed landscaping includes two (2) medium trees and small trees to be planted along with shrubs and ground cover, the species have been carefully curated by the landscape architect with the intent of being low maintenance, WaterWise species, and preference for native and endemic varieties.
<b>04.12.3</b> Landscape design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies.	<p>All landscaped areas will be reticulated using a variety of systems. These systems will include drip-feed and bubbler systems. A smart monitoring sensor network will help manage plant health and watering. All landscaping beds will be mulched to a minimum depth of 100mm. This will minimise the extent of water loss through evaporation.</p> <p>Stormwater will also be directed for the use on gardens, reducing the need for the use of reticulated water on gardens.</p> <p>The proposed design is considered to achieve and be consistent with the intent of this element objective.</p>
<b>04.12.4</b> Landscape design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and sustainability strategies.	The proposed landscaping is considered to be integrated with and complement the built form of the development overall.

4.13	Adaptive Reuse
<b>04.13.1</b> New additions to existing buildings are contemporary and complementary and do not detract from the character and scale of the existing building.	<i>Not applicable</i>

Element Objectives	Justification and Comment
<b>04.13.2</b> Residential dwellings within an adapted building provide good amenity for residents, generally in accordance with the requirements of this policy.	<i>Not applicable</i>

4.14	Mixed Use
<b>04.14.1</b> Mixed use development enhances the streetscape and activates the street.	<i>Not applicable</i>
<b>04.14.2</b> A safe and secure living environment for residents is maintained through the design and management of the impacts of non-residential uses such as noise, light, odour, traffic and waste.	<i>Not applicable</i>

4.15	Energy Efficiency
<b>04.15.1</b> Reduce energy consumption and greenhouse gas emissions from the development.	<p>The proposed apartments exceed the applicable NatHERS requirements. The following (building) energy efficiency measures are incorporated in the design:</p> <ul style="list-style-type: none"> <li>• The design proposes the use of light sensors and LED lights in all public areas to reduce electricity consumption across the site when areas are not in use.</li> <li>• All apartments will be fitted with a quality insulation treatment.</li> <li>• Potential for roof mounted photo-voltaic system is also proposed to be installed which will reduce the reliance on grid electricity.</li> <li>• Double glazed windows are proposed to certain key windows to reduce heat absorption / loss.</li> <li>• The design has extensively considered natural ventilation and solar access through and across the site to reduce the need for mechanical heating and cooling means year-round. The design has been further refined in response to DRP comments.</li> <li>• Bedrooms and living areas are positioned near the façade of the apartments to allow for improved access to daylight, natural ventilation, and opportunity for outlook to the street — improving their liveability, usability, and reducing the need for mechanical heating and cooling.</li> <li>• Materials with low ongoing maintenance requirements, and low embodied energy will be used throughout.</li> </ul>

Element Objectives		Justification and Comment
		<ul style="list-style-type: none"> <li>All individual apartments will be sub-metered.</li> </ul>
<b>4.16</b>	Water Management and Conservation	
<b>04.16.1</b>	Minimise potable water consumption throughout the development.	<p>Each apartment will utilise water efficient fixtures and fittings for the toilets and kitchen / bathroom taps and shower heads to reduce water consumption. Stormwater will be directed into garden-beds with overflow into soak-wells.</p> <p>Each apartment is individually metered for water and power use, which will reduce the amount of potable water consumption (as each resident will be individually liable for their own use).</p>
<b>04.16.2</b>	Stormwater runoff from small rainfall events is managed on-site, wherever practical.	<p>Specific details relating to water management and conservation are expected to be conditioned as a standard condition of approval / addressed at building permit stage. The site is capable of accommodating 1 in 1 year average recurrence interval (ARI) rainfall events.</p> <p>The design proposes to retain all stormwater which falls on the site within the site through soak wells and stormwater infrastructure. It is expected that this will be conditioned as a standard condition of development approval, with specific details relating to water management and conservation to be conditioned / addressed at building permit stage. Stormwater will be directed into garden beds to improve water usage across the development.</p>
<b>04.16.3</b>	Reduce the risk of flooding so that the likely impacts of major rainfall events will be minimal.	<p>The apartments will be capable of wholly accommodating 1 in 1 year ARI rainfall events on site. No basement is proposed and all floors are located above the surrounding natural ground level.</p> <p>The development is on an elevated site, there is minimal expected risk associated with flooding. The development will also meet the requirements of the National Construction Code.</p>
<b>4.17</b>	Waste Management	
<b>04.17.1</b>	Waste storage facilities minimise negative impacts on the streetscape, building entries and the amenity of residents.	<p>A detailed Waste Management Plan will be prepared for the proposed development to address the requirements of a Level 1A waste management plan for multiple dwelling in accordance with the <i>WALGA Multiple Dwelling Waste Management Plan Guidelines 2015</i>.</p>

Element Objectives	Justification and Comment
	<p>The proposed bin store is conveniently located near and provides direct access to the street over the driveway. The bin store is located behind the street setback area (within the basement) and not visible from the street, the apartments, or communal areas.</p> <p>The bin store will also include a washdown area, tap, and suitable drain with gross pollutant trap. A separate bulk waste store is also proposed a rubbish compactor as well.</p> <p>The amenity impact of the proposed bin storage is considered to be minimal. The bin store will also include a means of natural and mechanical ventilation.</p> <p>The bin store will be managed on an ongoing basis by the strata company caretaker in accordance with the waste management plan and reviewed on a regular ongoing basis.</p> <p>Furthermore, the bins will be collected from the verge area adjacent to the driveway on Belrose Park. The bins will be managed via the strata through the bylaws, whereby bins will only be carried out to the street during the evening and collected first thing in the morning post collection. This will ensure that are not retained on the verge for extended periods of time. The applicant is happy to accept a condition of approval accordingly.</p>
<b>04.17.2</b> Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.	Refer to the Waste Management Plan.

4.18	Utilities
<b>04.18.1</b> The site is serviced with power, water, gas (where available), wastewater, fire services and telecommunications / broadband services that are fit for purpose and meet current performance and access requirements of service providers.	<p>The proposed building services will include power, potable water, natural gas, reticulated sewerage, and NBN. These services will be fit for purpose and meet the performance and access requirements of the respective service providers.</p> <p>The location of the utilities and plant rooms are shown on the plans, and are not directly visible from the street. NBN and underground power are proposed to service the site.</p>

Element Objectives	Justification and Comment
	While no utility upgrades are required to service the apartments, should any upgrades be required, these will be borne by the developer in proportionate share.
<b>04.18.2</b> All utilities are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.	The design and location of building utilities including laundries, stores, site servicing infrastructure, waste collection rooms, and other utilities are proposed to be located so as to not be visually or acoustically obtrusive and to be functional and convenient to for use. These utilities will be located outside of pedestrian and vehicle movement areas.
<b>04.18.3</b> Utilities, such as distribution boxes, power and water meters are integrated into design of buildings and landscape so that they are not visually obtrusive from the street or open space within the development.	All services are integrated into the design and not visible from the primary street.
<b>04.18.4</b> Utilities within individual dwellings are of a functional size and layout and located to minimise noise or air quality impacts on habitable rooms and balconies.	There is not considered to be any adverse negative impact which will arise from the proposed development in relation to noise or air quality impacts from utilities within individual apartments. This includes from laundry rooms, store rooms, or bin stores. The specifics of utilities are expected to be conditioned as a standard condition of planning approval.



Figure 11 Whitfords Avenue Perspective

## PLANNING & DEVELOPMENT (LOCAL PLANNING SCHEMES) REGULATIONS 2015

The decision maker is to have due regard to various matters contained within clause 67 of Schedule 2 Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* (W.A.). It is noted that the development satisfies the matters to be considered by local government within clause 67 of these regulations. In considering an application for development approval the local government (or delegated decision-making authority/decision-maker) is to have due regard to the following matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application —

Provision		Justification and Comment
Clause 67 Deemed Provisions		Matters to be considered by local government / decision maker
a.	the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;	Satisfies aims and provisions of the Local Planning Scheme as discussed prior.
b.	any approved State planning policy;	Satisfies State Planning Policy framework.
c.	the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving;	Satisfies the requirements of orderly and proper planning.
d.	any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);	Not applicable to this site.
e.	any policy of the Commission;	Satisfies WAPC policies.
f.	any policy of the State;	Satisfies State policies.
g.	any local planning policy for the Scheme area;	Satisfies Local Planning Policy framework as detailed in the planning assessment section of this report.
h.	any structure plan, activity centre plan or local development plan that relates to the development;	Not applicable.
i.	any report of the review of the local planning scheme that has been published under the Planning and Development (Local Planning Schemes) Regulations 2015;	Not applicable to this site.
j.	in the case of land reserved under this Scheme, the objectives for the reserve and the additional and permitted uses identified in this Scheme for the reserve;	Not applicable to this site.
k.	the built heritage conservation of any place that is of cultural significance;	Satisfied. The lot does not contain registered places of Indigenous Australian or Australian heritage significance.
l.	the effect of the proposal on the cultural heritage significance of the area in which the development is located;	Satisfied. The lot does not contain registered places of Indigenous Australian or Australian heritage significance.
m.	the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of	Satisfies sub-clause m. The proposed development is considered to be compatible with its setting. Multiple dwellings are contemplated

Provision		Justification and Comment
	the height, bulk, scale, orientation and appearance of the development;	and encouraged by planning framework set out by the City of Joondalup.
<b>n.</b>	the amenity of the locality including the following — (i) environmental impacts of the development; (ii) the character of the locality; (iii) social impacts of the development;	Satisfies sub-clause n. The design considers the established character of the locality and associated environmental and social impacts. No significant adverse impact has been identified.
<b>o.</b>	the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;	Satisfies sub-clause o. No significant adverse impact has been identified in relation to the impact of the proposed development on the natural environment. Minimal excavation and fill works are proposed.
<b>p.</b>	whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;	The proposal satisfies sub-clause p. Landscaping and deep soil areas are provided throughout as shown on the submitted plans, which create an aesthetically pleasing outlook for future residents.
<b>q.</b>	the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;	The site is not within a bush fire risk area or 1 in 100-year flood area. No other specific site constraints related to clause <i>q</i> have been identified.
<b>r.</b>	the suitability of the land for the development taking into account the possible risk to human health or safety;	The land is suitable to be developed to the standard proposed. The site proposes minimal risk to human health and safety and will meet (and be required to meet) the standards on the National Construction Code.
<b>s.</b>	the adequacy of — (i) the proposed means of access to and egress from the site; and (ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;	The proposed vehicular and pedestrian access is adequate, clearly legible and suitable for the proposed development.
<b>t.</b>	the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;	The site is in close proximity to multi-modal transport options. Expected traffic volumes capable of being handled within the site and proposed development. The site is within a location A area. Car parking provision suitable for local area. Refer to the Traffic Impact Statement.
<b>u.</b>	the availability and adequacy for the development of the following — (i) public transport services; (ii) public utility services; (iii) storage, management and collection of waste; (iv) access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities); (v) access by older people and people with disability;	The site is in close proximity to multi-modal transport options. The development proposes a suitable amount of amenity for pedestrians and cyclists. Waste and site servicing requirements are to standard. Design provides suitable access options for older people and people with a movement disability.
<b>v.</b>	the potential loss of any community service or benefit resulting from the development other than potential loss	The development satisfies sub-clause v. No adverse negative impact to community service or community benefit identified.

Provision		Justification and Comment
	that may result from economic competition between new and existing businesses;	
<b>w.</b>	the history of the site where the development is to be located;	Development in the local area has been traditionally residential suburban development. No historical issues of note have been identified for the subject site.
<b>x.</b>	the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;	The design is considered to increase the opportunity for interaction and activity on the street and provide an overall community benefit. The design satisfies sub-clause x.
<b>y.</b>	any submissions received on the application;	The development is subject to advertising.
<b>za.</b>	the comments or submissions received from any authority consulted under clause 66;	Not applicable.
<b>zb.</b>	any other planning consideration the local government considers appropriate.	Not applicable.

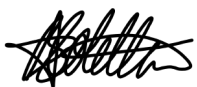
## CONCLUSION

The City's request for additional information has been duly considered and addressed in the amended plans and further information presented in this submission. The changes proposed to the development have improved the design of the building.

The proposed development is shown to achieve the element objectives of the Residential Design Codes Volume 2 and the City's support for development approval is therefore welcomed.

Should you wish to discuss the matter in more detail, please contact undersigned on 6441 9171.

Yours Sincerely



Bianca Sandri  
Urbanista Town Planning

Our Ref: 1080

2 June 2020

Chief Executive Officer  
City of Joondalup  
PO Box 21  
JOONDALUP WA 6919

Dear Sir/Madam,


**Lot 945 (12) Northwood Way, Kallaroo - Proposed Seven Multiple Dwellings (Apartments)  
Independent Planning Assessment for s.31(1) State Administrative Tribunal  
reconsideration**

Dynamic Planning and Developments Pty Ltd acts on behalf of the City of Joondalup with regard to the abovementioned application which is currently the subject of an Application for Review with the State Administrative Tribunal.

Pursuant to s 31(1) of the *State Administrative Tribunal Act 2004 (WA)* the City has been invited to reconsider its previous decision to refuse the proposal.

This report provides an independent assessment and recommendation of the revised proposal submitted by the applicant for consideration by the City.

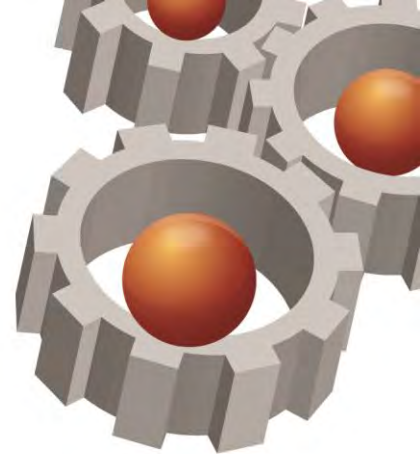
Yours faithfully,



**Dynamic Planning and Developments**

Enc.

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## Details of the Proposal:

The proposed development comprises the following:

- Seven multiple dwellings within a two-storey building.
- Two dwellings are located on the ground floor next to the public open space, with five dwellings located on the upper floor, with access via a communal foyer.
- Six dwellings contain two bedrooms and one dwelling is one-bedroom.
- The site is a battleaxe lot, with a four-metre wide access leg from Northwood Way, next to Belrose Park.
- The proposed dwellings to the western boundary of the site are orientated to face Belrose Park, with the provision of balconies and courtyards, as well as open style fencing.
- Ten resident bays and two visitor bays are provided. Five bicycles bays for residents and visitors are also proposed.
- The building façade incorporates rendered brickwork and cladding. Private balconies contain clear glazed balustrading. A mixture of rendered brickwork and fixed obscured louvre screens are provided to northern elevation of the common foyer.
- Bin storage is located on the ground floor. Bin collection is proposed to be off-site, as per the proposed Waste Management Plan.

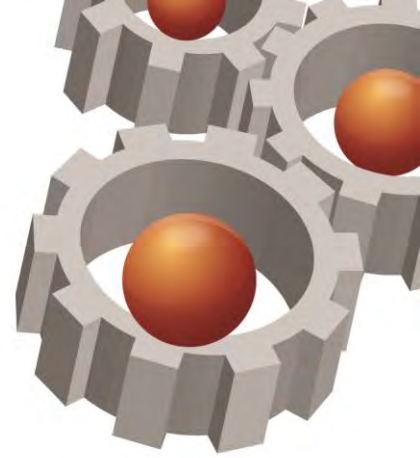
## Planning assessment:

An assessment has been undertaken against the relevant provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015*, City of Joondalup Local Planning Scheme No. 3 (LPS No. 3), State Planning Policy 7.3 - Residential Design Codes Volume 2 Apartments (SPP7.3 Vol 2) and City's Residential Development Local Planning Policy (RDLPP).

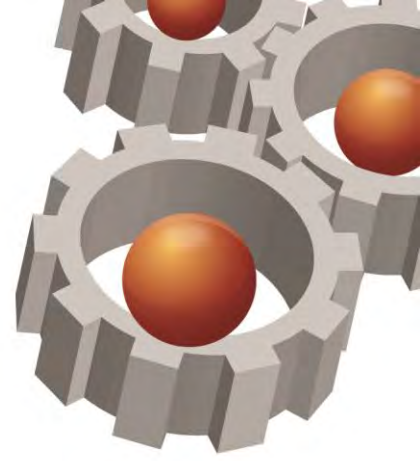
### Planning and Development (Local Planning Schemes) Regulations 2015

Clause 67 of Schedule 2 of the Regulations sets out the matters to be considered by Council when determining an application for development approval, these being as follows:

- (a) *the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;*
- (b) *the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or. any other*



- proposed planning instrument that the local government is seriously considering adopting or approving;*
- (c) any approved State planning policy;*
  - (d) any environmental protection policy approved under the Environmental Protection Act 1986 section 31(d);*
  - (e) any policy of the Commission;*
  - (f) any policy of the State;*
  - (g) any local planning policy for the Scheme area;*
  - (h) any structure plan, activity centre plan or local development plan that relates to the development;*
  - (i) any report of the review of the local planning scheme that has been published under the Planning and Development (Local Planning Schemes) Regulations 2015;*
  - (j) in the case of land reserved under this Scheme, the objectives for the reserve and the additional and permitted uses identified in this Scheme for the reserve;*
  - (k) the built heritage conservation of any place that is of cultural significance;*
  - (l) the effect of the proposal on the cultural heritage significance of the area in which the development is located;*
  - (m) the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;*
  - (n) the amenity of the locality including the following —*
    - i. environmental impacts of the development;*
    - ii. the character of the locality;*
    - iii. social impacts of the development;*
  - (o) the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;*
  - (p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;*
  - (q) the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;*
  - (r) the suitability of the land for the development taking into account the possible risk to human health or safety;*
  - (s) the adequacy of —*



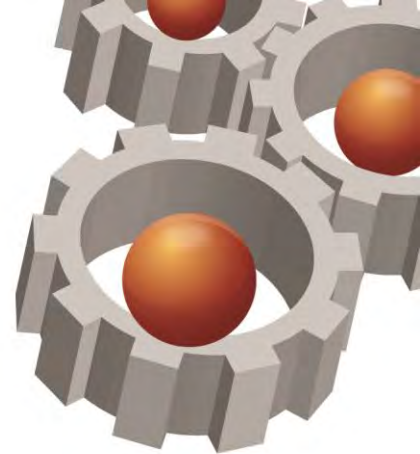
- i. *the proposed means of access to and egress from the site; and*
  - ii. *arrangements for the loading, unloading, manoeuvring and parking of vehicles;*
- (t) *the amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;*
- (u) *the availability and adequacy for the development of the following —*
  - i. *public transport services;*
  - ii. *public utility services;*
  - iii. *storage, management and collection of waste;*
  - iv. *access for pedestrians and cyclists (including end of trip storage, toilet and shower facilities);*
  - v. *access by older people and people with disability;*
- (v) *the potential loss of any community service or benefit resulting from the development other than potential loss that may result from economic competition between new and existing businesses;*
- (w) *the history of the site where the development is to be located;*
- (x) *the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;*
- (y) *any submissions received on the application;*
- (za) *the comments or submissions received from any authority consulted under clause 66;*
- (zb) *any other planning consideration the local government considers appropriate.*

#### Local Planning Scheme No. 3

The subject site is zoned 'Residential' with a density coding of R20/40.

The objective of the 'Residential' zone is:

- *To provide for a range of housing and a choice of residential densities to meet the needs of the community.*
- *To facilitate and encourage high quality design, built form and streetscapes throughout residential areas.*
- *To provide for a range of non-residential uses, which are compatible with and complementary to residential development.*



'Multiple Dwellings' within the 'Residential' zone is a 'D' use meaning "... *that the use is not permitted unless the local government has exercised its discretion by granting development approval*".

Within areas where a dual density code applies, the base R20 density code shall apply, unless it is determined that the higher code is acceptable having regard to cl. 26(5) of LPS No. 3 which states:

- *Development which complies with a minimum frontage of 10 metres at the setback line, with the exception of multiple dwelling sites; or*
- *Development of multiple dwelling sites which complies with a minimum site width of 20 metres at the street boundary.*

Having regard to the requirements of the RDLPP, which excludes battleaxe sites from the 20 metre frontage requirement, it is considered that multiple dwellings are still able to be approved for the site, subject to meeting other applicable planning requirements.

#### Residential Development Local Planning Policy

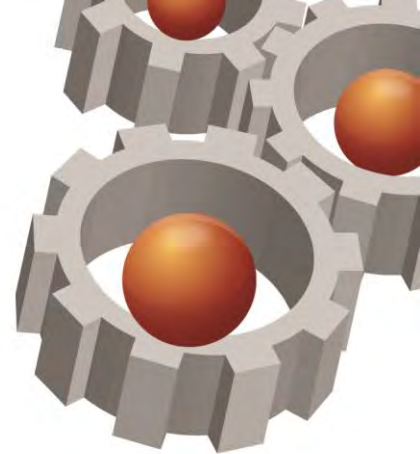
The RDLPP applies to all residential development within the City of Joondalup and establishes agreed standards for the assessment and determination of applications for Development Approval and applications requiring the exercise of discretion under the City of Joondalup LPS No. 3 or R-Codes.

The provisions of the RDLPP replace a number of requirements contained within SPP7.3 as provided for under the structure of the state planning policy. A detailed assessment of the proposal has been undertaken against the provisions of SPP7.3 with the applicable RDLPP provisions being considered - refer **Attachment 1**.

#### State Planning Policy 7.3 Residential Design Codes Volume 2 – Apartments

SPP7.3 Vol 2 provides planning and design standards for residential apartments (multiple dwellings) in areas coded R40 and above, within mixed use development and activity centres.

SPP7.3 Vol 2 is broken up into 3 main parts being 'primary controls', 'siting the development' and 'designing the building'. Within each of these parts are a range of design elements, each dealing with a different aspect of building siting and design. For example, 'primary controls' consists of the following design elements:



- building height;
- street setbacks;
- side and rear setbacks;
- plot ratio;
- building depth;
- building separation; and
- development incentives for community benefit.

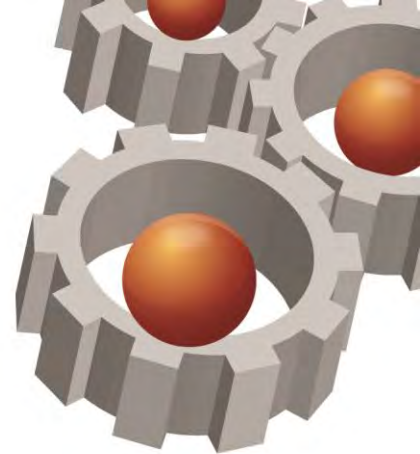
Each design element includes the following sections to inform assessment of applications for development approval:

- A statement of Intent for each element that explains the intended outcome and why it is important.
- Element Objectives that define the intended outcome for the element.
- Acceptable Outcomes that are specific measures and outcomes to assist in meeting the Element Objectives.
- Guidance including matters to be considered and design responses that can achieve the Objectives:
  - in Part 2 the Planning Guidance is for local governments in preparing modifications to the Primary Controls through the local planning framework to respond to local character and contexts
  - in Parts 3 and 4 the Design Guidance is for designers and development assessors

SPP7.3 Vol 2 is a performance-based policy. Applications for development approval need to demonstrate that the design achieves the objectives of each design element. While addressing the Acceptable Outcomes is likely to achieve the Objectives, they are not a deemed-to-comply pathway and the proposal will be assessed in context of the entire design solution to ensure the Objectives are achieved. Proposals may also satisfy the Objectives via alternative means or solutions.

A detailed assessment of the proposal against SPP7.3 Vol 2 and the City's RDLPP is contained in **Attachment 1** of this assessment report. The assessment sheet provides a comprehensive analysis of the proposal against each of the design elements and where applicable, consideration against the element objectives having regard to any planning guidances.

The following sections below provide further discussion on the individual design elements to which a variation is sought by the subject proposal.



#### **Clause 2.4 – Side and Rear Setbacks**

The proposal seeks the following side setback variations to the applicable acceptable outcome criteria:

<b>A2.4.1 Required</b>	<b>Proposed</b>
Southern boundary - 2.4m	Ground Floor - 2.25m minimum First Floor - 1.6m (min) to 2.5m (max)
Western boundary - 2.4m	Ground Floor - 2.0m First Floor - 1.5m (min) to 1.8m (max)
Northern boundary - 2.4m	Ground Floor - 1.92m (min) First Floor - 1.74m (min)

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.2.4 are as follows:

##### **Element Objectives:**

**O 2.4.1 Building boundary setbacks** provide for adequate separation between neighbouring properties.

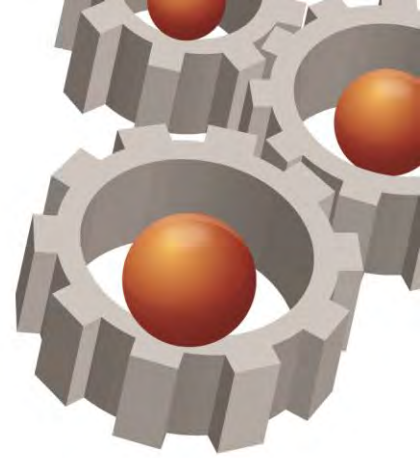
**O 2.4.2 Building boundary setbacks** are consistent with the existing **streetscape** pattern or the desired streetscape character.

**O 2.4.3 The setback of development** from side and rear boundaries enables retention of existing trees and provision of **deep soil areas** that reinforce the **landscape character** of the area, support tree canopy and assist with **stormwater** management.

**O 2.4.4 The setback of development** from side and rear boundaries provides a transition between **sites** with different land uses or intensity of development.

The proposal has been assessed against and is deemed to satisfy Element Objectives 2.4.1, 2.4.2 and 2.4.4 however, **does not** satisfy Element Objective 2.4.3 on the following basis:

- As identified under **cl. 3.3 - tree canopy & deep soil areas** further below, the proposal seeks a variation to the provision of deep soil area (DSA). The shortfall in the DSA is considered to be directly related to the setback variations which evidently reduce the amount of non-building area available on-site. These setback variations on all three sides are considered to result in an adverse building bulk to the adjoining neighbours due to the building form being in closer proximity. This is further compounded by the fact that a reduced DSA area relative to tree planting is not available to ameliorate building bulk.
- In the location of the proposed DSA's, building setbacks are considered to be inadequate given likely conflict between the growth of mature medium or large trees and their



canopies and the building structure. Figure 1 below illustrates the location of roof / building structure and the location of DSA's intended to facilitate tree growth.



Figure 1 - Building structure / roof overlay with landscape plan

### Clause 3.2 - Orientation

The proposal seeks the following orientation variation to the applicable acceptable outcome criteria:

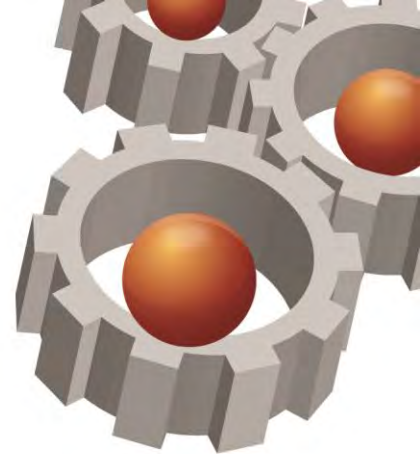
Required	Proposed
<b>A3.2.2</b> Buildings that do not have frontages to streets or public realm are oriented to maximise northern solar access to living areas.	Northern orientation has not been maximised.

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.3.2 are as follows:

#### Element Objectives:

**O 3.2.1 Building** layouts respond to the **streetscape**, topography and **site** attributes while optimising **solar** and **daylight** access within the **development**.

**O 3.2.2 Building** form and orientation minimises overshadowing of the **habitable rooms**, **open space** and **solar collectors** of neighbouring properties during **mid-winter**.



The proposal has been assessed against and is deemed to satisfy Element Objectives 3.3.1, 3.2.3 and 3.2.4. However, the proposal has been assessed against and is deemed to NOT satisfy Element Objective 3.2.2 on the following basis:

- The proposal has been designed to provide a frontage / aspect towards Whitfords Avenue as well as Belrose Park which is appropriate to ensure a degree of passive surveillance is achieved as well as compliance with A3.2.1 above. However, this design approach has been at the expense of reducing northern orientation to the majority of units. Detailed reasons are provided further below under cl.4.1: solar & daylight access.

### **Clause 3.3 – Tree Canopy & Deep Soil Areas**

The proposal seeks the following tree canopy / DSA variations to the applicable acceptable outcome criteria:

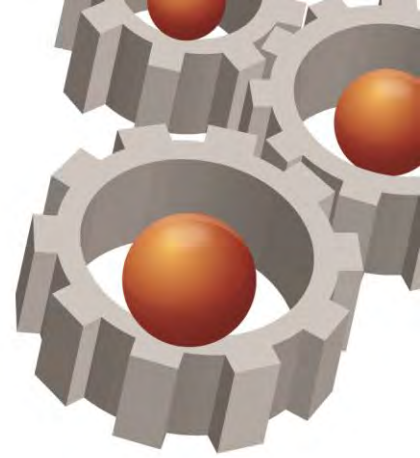
<b>Required</b>	<b>Proposed</b>
A3.3.1 retention of existing trees which meet the following criteria: <ul style="list-style-type: none"> <li>○ Healthy specimens;</li> <li>○ Not a State or Local weed;</li> <li>○ 4.0m high or more;</li> <li>○ Trunk diameter &gt;160mm measured 1m from ground;</li> <li>○ Average canopy diameter of 4m.</li> </ul>	All existing trees proposed to be removed.
A3.3.2 Removal of existing trees that meet A3.3.1 above is supported by an arboriculture report.	Arboriculture report not provided.
A3.3.4 Tree DSA - 1 large tree & small trees to suit	7.6sqm, 26.4sqm & 19.8sqm = 53.8sqm
A3.3.5 Landscaping includes existing and new trees with shade producing canopies in accordance with Tables 3.3a and 3.3b.	Nil large or medium tree canopy space

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.3.3 are as follows:

#### **Element Objectives:**

**O 3.3.1** *Site planning maximises retention of existing healthy and appropriate and protects the viability of **adjoining trees**.*

**O 3.3.2** *Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from **pre-development** condition.*



**O 3.3.3 Development** includes **deep soil areas**, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.

The proposal has been assessed against the Element Objectives and **does not** satisfy Element Objectives 3.3.1, 3.3.2 and 3.3.3 on the following basis:

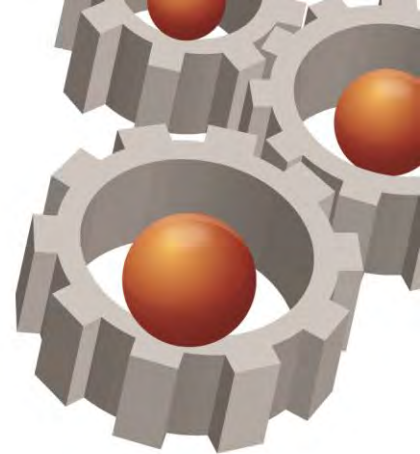
- The subject site comprises one tree which meets the retention criteria of cl. 3.3.1 of the acceptable outcomes - refer Figure 2 below. No information has been supplied by the applicant with regard to whether the tree warrants retention or not.



Figure 2 - Extract of feature and contour survey plan

- Whilst the site provides excess overall DSA (landscape) areas (241.1sqm in lieu of 101.7sqm) to support a range of turf, ground cover, shrubs and small ornamental planting, insufficient space is provided to support the required Tree DSA planting. As illustrated in Figure 3.3b of SPP7.3 Vol 2 (refer Figure 3 below), medium and large trees require ample space to accommodate both the root zone as well as tree canopy at maturity.

In this instance, three Tree DSA areas are proposed on the north-west and north-eastern portions of the subject site being 7.6sqm, 19.8sqm and 26.4sqm in area. The acceptable outcome criteria require atleast 1 large tree (64sqm) to be provided. As such, the proposal falls notably short. The proposed areas are also inadequate to satisfy the area



required for medium trees as well. As noted above under cl. 2.4 and as illustrated in Figure 1, reduced setbacks further restrict the growth of tree canopies with inevitable clashing with the building structure unless trees are pruned / cut back.

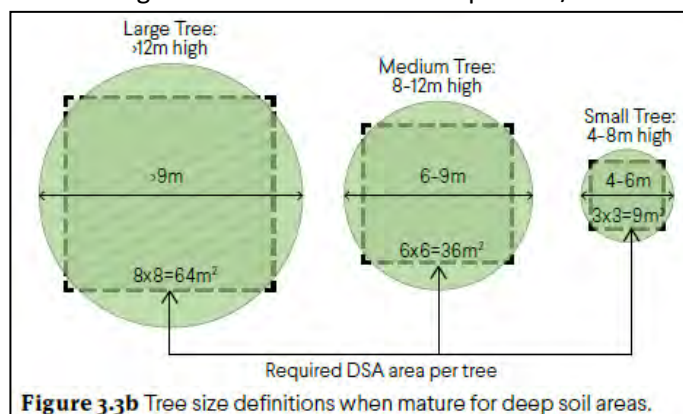


Figure 3 - Extract of Figure 3.3b of SPP7.3 Vol 2

- The submitted landscape plan by Naturesque proposes the tree species *Triadica Sebifera* (Chinese Tallow) to be planted within part of the 26.4sqm and 19.8sqm Tree DSA areas and a *Lagerstroemia Indica x L.fauriei* (Tuscarora) within the 7.6sqm and remaining part of the 26.4sqm Tree DSA area. The landscape plan indicates that these trees will mature to the following sizes:

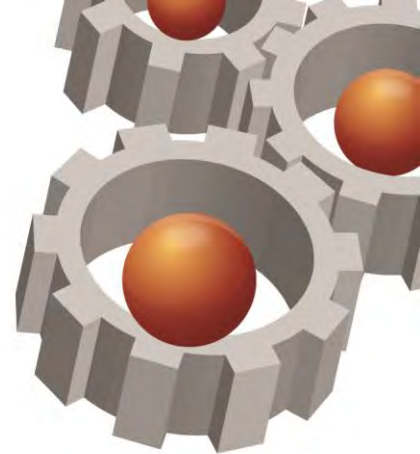
- Chinese Tallow - 10.0m height x 6.0m spread / canopy; and,
- Tuscarora - 4.0m height x 3.0m spread / canopy.

As noted previously, the location of the Tree DSA, its size (or lack thereof) and reduced building setbacks (cl. 2.4) are considered to have a detrimental impact towards the ability of the site to accommodate and sustain healthy tree growth.

### Clause 3.4 – Communal Open Space

The proposal seeks the following communal open space (COS) variation to the applicable acceptable outcome criteria:

Required	Proposed
A3.4.7 COS designed & oriented to minimise the impacts of noise, odour, light-spill and overlooking on the habitable rooms and private open spaces within the site AND of neighbouring properties.	COS can overlook into Unit 1 bedroom major opening.



Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.3.4 are as follows:

**Element Objectives:**

**O 3.4.1** *Provision of quality **communal open space** that enhances resident **amenity** and provides opportunities for **landscaping**, tree retention and **deep soil areas**.*

**O 3.4.2** ***Communal open space** is safe, **universally accessible** and provides a high level of **amenity** for residents.*

**O 3.4.3** ***Communal open space** is designed and oriented to minimise impacts on the **habitable rooms** and **private open space** within the **site** and of neighbouring properties.*

The proposal has been assessed against and is deemed to satisfy Element Objectives 3.4.1, 3.4.2 and 3.4.3 on the following basis:

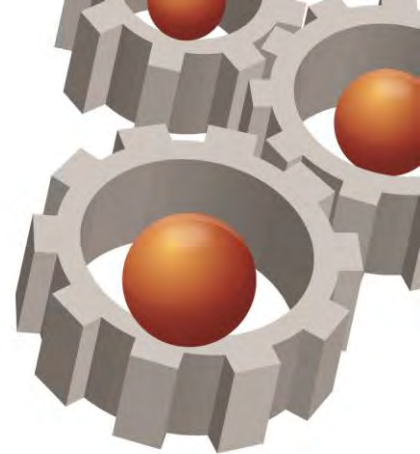
- The location and size of COS is deemed adequate based on the scale of the development (i.e. <10 units).
- The COS will be universally accessible and provides an amenity for residents. In this instance, the ground floor COS will supplement the adjoining Belrose Park which provides an additional level of amenity for future occupants.
- Subject to the unit 1 bedroom major opening being amended to avoid direct view from the COS and/or landscape treatment which provides adequate screening, the COS will have minimal impact to the residential amenity levels of unit 1.

**Clause 3.5 – Visual Privacy**

The proposal seeks the following visual privacy variation to the applicable acceptable outcome criteria:

Required	Proposed
A3.5.4 Windows and balconies are sited, oriented, offset or articulated to restrict direct overlooking, without excessive reliance on high sill levels or permanent screening of windows and balconies.	Unit 5 and 6 contains major openings which have direct over-looking onto public foyer area.

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.3.5 are as follows:



**Element Objective:**

**O 3.5.1** The orientation and design of **buildings**, windows and **balconies** minimises direct overlooking of **habitable rooms** and private outdoor living areas within the **site** and of neighbouring properties, while maintaining **daylight** and **solar access**, ventilation and the external outlook of habitable rooms.

The proposal has been assessed against and is deemed to satisfy Element Objective 3.5.1 on the following basis:

- Unit 5 and 6 major openings have been provided with a 1.5m wide landscape planter area in front of the opening with landscaping proposed that will provide natural screening once plants are established. It is noted that this approach has been acknowledged as being an acceptable design response to maintaining comfortable separation between accessways and apartments - refer Figure 4 below.

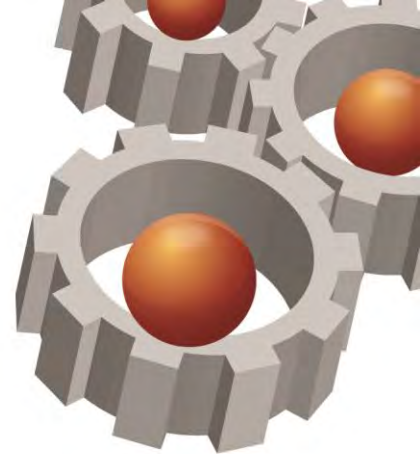


**Figure 4.5a** A range of design responses to maintaining comfortable separation between open gallery accessways and apartments.

**Figure 4 - Extract of Figure 4.5a of SPP7.3 Vol 2**

**Clause 4.1 – Solar & Daylight Access**

The proposal seeks the following solar & daylight access variation to the applicable acceptable outcome criteria:



Required	Proposed
<p>A4.1.1 Min. 70% of dwellings having living rooms and private open space that obtain at least 2 hours direct sunlight between 9am and 3pm on 21 June <b>AND</b> Max. 15% of dwellings receiving no direct sunlight between 9am and 3pm on 21 June.</p>	<p>Unit 1, 3 and 4 (43%) achieve direct sunlight into living rooms and private open space between 9am and 3pm. All other units do not (57%).</p>
A4.1.3 Lightwells and/or skylights do not form the primary source of daylight to any habitable room	Lightwells primary source of daylight for units 5, 6 and 7.

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.4.1 are as follows:

**Element Objectives:**

**O 4.1.1** In *climate zones 4, 5 and 6*: the **development** is sited and designed to optimise the number of **dwellings** receiving winter **sunlight** to **private open space** and via windows to **habitable rooms**.

**O 4.1.2** Windows are designed and positioned to optimise **daylight** access for **habitable rooms**.

**O 4.1.3** The **development** incorporates shading and glare control to minimise heat gain and glare: from mid-spring to autumn in *climate zones 4, 5 and 6*

The proposal has been assessed against and is deemed to satisfy Element Objectives 4.1.3 however, **does not** satisfy Element Objectives 4.1.1 and 4.1.2 on the following basis:

- 57% or 4 units do not achieve adequate north-facing living rooms and primary outdoor living areas (i.e. balconies) in order to obtain atleast 2-hours of direct sunlight between 9am and 3pm on 21 June.

**Note:** For the purposes of assessing direct sunlight access between the 21 June 9.00am and 3.00pm period, data has been sourced from <https://www.suncalc.org> - refer Figure 5.

Assessment of whether each unit achieves a minimum of 2-hours direct sunlight between 9.00am to 3.00pm is summarised in Table 1 below.

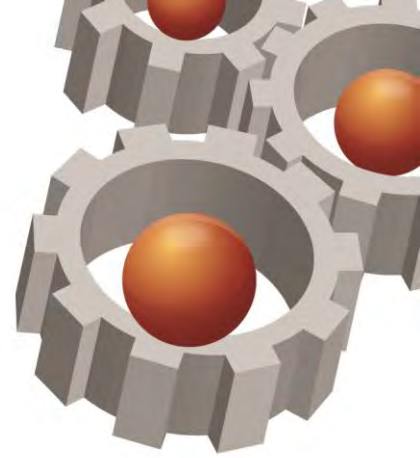
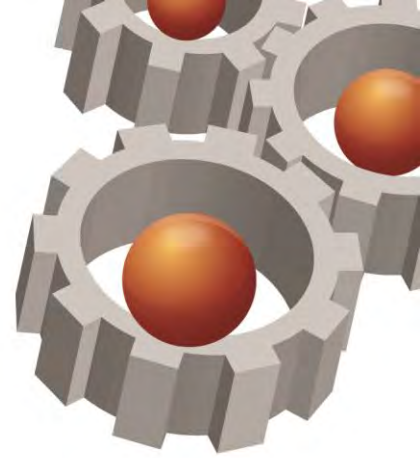


Figure 5 - Extract of sun angle relative to north

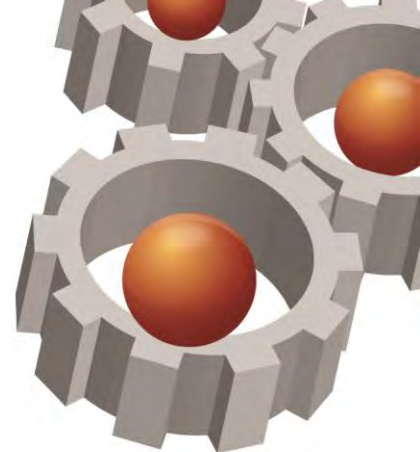
Unit No.	Access diagram -direct sunlight between 9am & 3pm for 2 hours (minimum)	Achieved (Yes/ No)
1		Outdoor area - Yes Living - Yes
2		Outdoor area - Yes Living - No



3		Outdoor area - Yes Living - Yes
4		Outdoor area - Yes Living - No
5		Outdoor area - No Living - No
6		Outdoor area - No Living - No
7		Outdoor area - No Living - No

**Table 1 - Analysis of direct sunlight access between 9.00am and 3.00pm**

- As detailed in Table 1 above, balconies and living rooms for units 5, 6 and 7 are south facing with no direct sunlight achieved. Whilst it is acknowledged that skylights have been provided for these units, cl.4.1.3 does not recommend the use of lightwells or skylights to be the primary source of light. In this instance, it is considered that it would be possible to design these units with a north-facing aspect for outdoor living areas and living rooms whilst also providing a frontage aspect to Whitfords Road and/or Belrose Park to ensure that passive surveillance is also achieved.



- Whilst an attempt has been made to provide north facing major opening windows on units 5, 6 and 7, these are constrained for sunlight access due to landscape treatment that is needed in order to minimise privacy issues resulting from having major openings opening up directly onto circulation and common spaces (refer cl. 4.5).

#### **Clause 4.3 – Size & Layout of dwellings**

The proposal seeks the following solar & daylight access variation to the applicable acceptable outcome criteria:

Required	Proposed
<b>A4.3.2</b> Habitable rooms have minimum floor areas and dimensions in accordance with Table 4.3b:	Unit 3 living - 14.4sqm @ 3.41m x 4.21m
o Master Bed           10sqm @ 3m x 3m min.	
o Other Bed            9sqm @ 3m x 3m min.	Unit 4 living - 17.1sqm @ 3.65m x 4.69m
<u>Studio / 1 bed</u>	
o Living                n/a @ 3.6m x 3.6m min.	
<u>Other dwelling types</u>	Unit 7 Bed 2 - 9.5sqm @ 2.7m x 3.53m
o Living                n/a @ 4m x 4m min.	

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.4.3 are as follows:

##### **Element Objectives:**

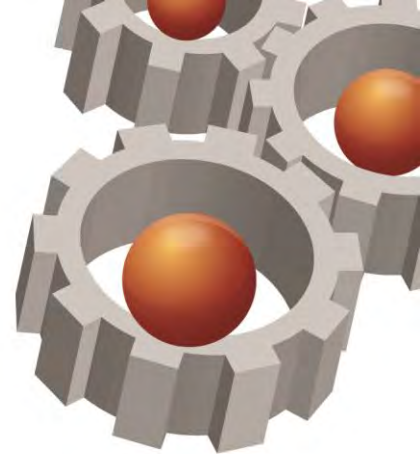
- O 4.3.1** *The internal size and layout of **dwellings** is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size.*
- O 4.3.2** *Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good **natural ventilation** and **daylight** access.*

The proposal has been assessed against and is deemed to satisfy Element Objectives 4.3.1 and 4.3.2 on the following basis:

- Whilst there are minor dimension variations to habitable rooms, overall areas are above and beyond the minimum requirement and room shapes are considered to be functional and provide a reasonable level of amenity for future occupants.

#### **Clause 4.4 – Private Open Space & Balconies**

The proposal seeks the following private open space & balconies variation to the applicable acceptable outcome criteria:



Required	Proposed
<b>A4.4.4</b> Services and fixtures located within private open space, (e.g. air-conditioner units, clothes drying etc), not visible from the street / integrated into building design.	Hot water systems located on the balconies for units 3-7.

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.4.4 are as follows:

**Element Objectives:**

- O 4.4.1** *Dwellings have good access to appropriately sized **private open space** that enhances residential **amenity**.*
- O 4.4.2** ***Private open space** is sited, oriented and designed to enhance liveability for residents.*
- O 4.4.3** ***Private open space** and **balconies** are integrated into the overall architectural form and detail of the **building**.*

The proposal has been assessed against and is deemed to satisfy Element Objective 4.4.1. 4.4.2 and 4.4.3 on the following basis:

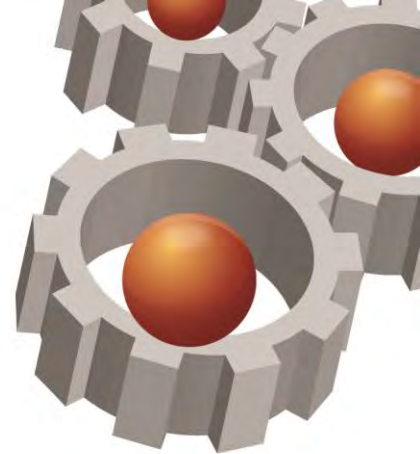
- Hot water systems are located on balconies however the hot water system units are not considered to impact functionality of the balcony areas, particularly due to the fact that overall areas of balconies are above and beyond the minimum required.

**Clause 4.5 – Circulation & Common Spaces**

The proposal seeks the following private open space & balconies variation to the applicable acceptable outcome criteria:

Required	Proposed
<b>A4.5.5</b> <ul style="list-style-type: none"> <li>Bedroom windows &amp; major openings to living rooms do not open directly onto circulation or common spaces.</li> <li>Designed to ensure visual privacy &amp; manage noise intrusion.</li> </ul>	<ul style="list-style-type: none"> <li>Unit 1 bed 1 opens to COS</li> <li>Unit 5 kitchen and bed 2 opens to foyer</li> <li>Unit 6 kitchen and bed 2 opens to foyer</li> </ul>

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.4.5 are as follows:



**Element Objectives:**

**O 4.5.1** *Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.*

**O 4.5.2** *Circulation and common spaces are attractive, have good **amenity** and support opportunities for social interaction between residents.*

The proposal has been assessed against and is deemed to satisfy Element Objective 4.5.1 and 4.5.2 on the following basis:

- Subject to appropriate landscape treatment, adequate visual privacy and separation can be achieved between habitable rooms and common spaces. As justified under cl. 3.5 above, separation of accessways and apartments through landscape beds and voids are considered to be an acceptable design response to maintaining comfortable separation between the private and public realm.

**Clause 4.12 – Landscape Design**

The proposal seeks the following landscape Design variation to the applicable acceptable outcome criteria:

Required	Proposed
<b>A4.12.2</b> Landscaped areas located & designed to support mature, shade-providing trees to open space and the public realm and improve amenity of development.	Shortfall in Tree DSA areas - refer cl. 3.3 above.

Where a variation, is sought to the acceptable outcome criteria, a proposal must demonstrate that the design achieves the objectives of that design element, having regard to any planning guidance. The element objectives of cl.4.12 are as follows:

**Element Objectives:**

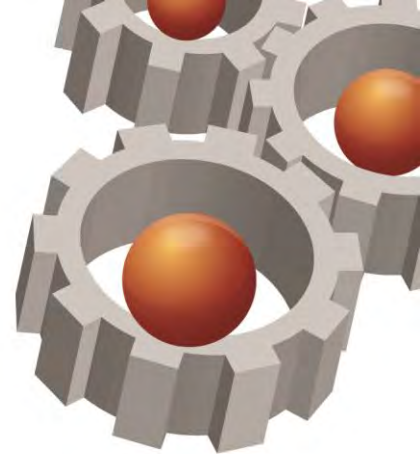
**O 4.12.1** *Landscape design enhances **streetscape** and pedestrian **amenity**; improves the visual appeal and comfort of **open space** areas; and provides an attractive outlook for **habitable rooms**.*

**O 4.12.2** *Plant selection is appropriate to the orientation, exposure and **site** conditions and is suitable for the adjoining uses.*

**O 4.12.3** *Landscape design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies.*

**O.4.12.4** *Landscape design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and **sustainability** strategies.*

The proposal has been assessed against and is deemed to satisfy Element Objectives 4.12.1, 4.12.3 and 4.12.4 however, **does not** satisfy Element Objective 4.12.2 on the following basis:



- Whilst the proposal has generally provided sufficient details regarding the landscaping, concern is expressed in relation to the feasibility of the proposed trees and the ability of the development to achieve appropriate canopy cover given the limited availability of Tree DSA / canopy coverage area for reasons already outlined under cl. 2.4 and cl. 3.3 above.
- Adverse amenity impact to adjoining properties by virtue of insufficient DSA and required canopy coverage.

#### **Clause 4.17 – Waste Management**

The proposal seeks the following waste management variation to the applicable acceptable outcome criteria:

Required	Proposed
<b>A4.17.1</b> Waste storage provided as per local government requirements: <ul style="list-style-type: none"> <li>○ 4 x 240L general waste, 3 x recycling (2 x 240L + 1 x 360L) and 1 x green waste.</li> </ul>	5 x 240L general waste, 2 x recycling and 1 x green waste.

In this instance, the bin types can be modified to achieve compliance with the local government requirement. To this end, consideration against the applicable design objectives is not required.

#### **Issues and options considered:**

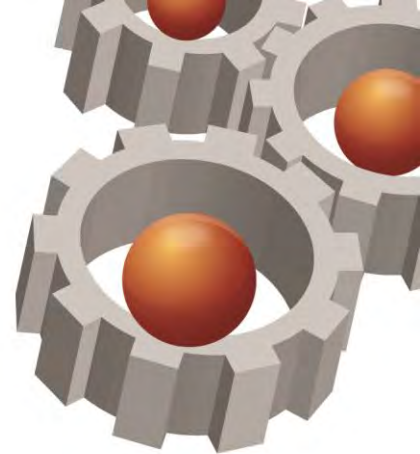
Council is required to determine whether the proposed development of seven multiple dwellings at Lot 945 (12) Northwood Way, Kallaroo is appropriate.

Council may determine an application for development approval by:

1. Granting development approval without conditions;
2. Granting development approval with conditions; or
3. Refusing to grant development approval.

#### **Consultation:**

The application was advertised for a period of 14 days, commencing on 4 May 2020 and concluding on 19 May 2020.



At the conclusion of the consultation period, a total of 112 submissions were received, being 22 objections and 90 submission in support.

Of the 90 submissions in support, 22 were received from Kallaroo residents with the remaining from people living in other suburbs of WA including Ocean Reef, Jindalee, Carramar, Baldivis, Butler, Northam, Aveley, Alkimos, Geraldton. A further 2 submission were also received from inter-state suburbs of Oatley NSW and North Mackay QLD.

Of the 22 objections, all were received from Kallaroo residents.

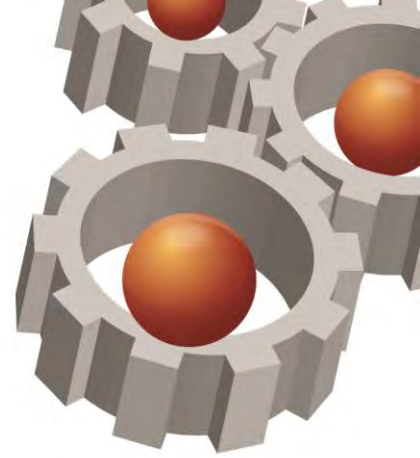
Reasons in support of the proposal can be summarised based on the following key themes:

- Proposal is of a modern design with good amenities.
- Affordability.
- Good access to services and amenities.
- Ability to downsize within the area.
- Diversity in housing options.

Reasons in objection of the proposal can be summarised based on the following key themes:

- Non-compliance with SPP7.3 with regard to the following design elements:- building height, lot boundary setbacks, plot ratio, building separation, orientation, tree canopy & deep soil areas, visual privacy, pedestrian access & entries, vehicular access, car & bicycle parking, solar & daylight access, natural ventilation, dwelling size, storage, noise impacts, facade design and waste management.
- Non-compliance with cl. 67(b),(m), (n), (r), (s), (t), (u), (x) of the Regulations.
- Adverse traffic impact.
- Adverse impact to the character of the streetscape and surrounding area.
- Adverse design impacts due to bulk and scale as well as inadequate vegetation / landscaping.
- Non-compliance with the City's draft Development in Housing Opportunity Areas Policy.
- Adverse social impacts due to traffic safety, noise and anti-social behaviour.
- Precedent of similar developments being approved in the locality.
- Devalue property values.

A detailed summary of the objections received and a response to the matters raised are provided as part of **Attachment 2** of this report.



### **Comment:**

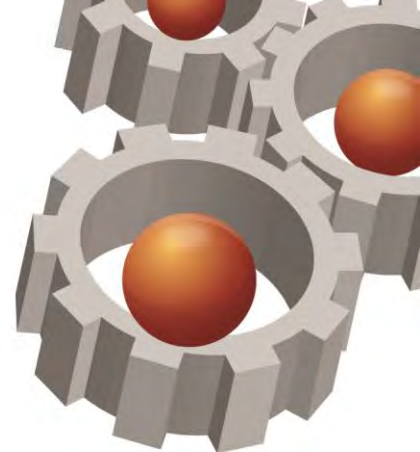
Based on the preceding sections above, the proposal comprises a number of variations to the applicable planning framework. Whilst a number of variations to the acceptable outcome criteria are relatively minor and therefore satisfy the applicable element objectives, the cumulative impact of a number of the other variations are considered to have a compounding effect in compromising the overall amenity and functionality of the proposed development. Specifically, these design elements are:

- Clause 2.4 – Side and Rear Setbacks.
- Clause 3.2 – Orientation.
- Clause 3.3 – Tree Canopy & Deep Soil Areas.
- Clause 4.1 – Solar & Daylight Access.
- Clause 4.12 – Landscape Design.

It is noted that a number of these design elements are directly related to one-another in that a variation in one is directly related to an element objective of the other/s. For example, reduced lot boundary setbacks are directly proportionate to reduced DSA area, specifically with regard to the DSA area for trees of which there is a notable shortfall as detailed in the preceding sections above.

A number of the design elements are also directly related to one another which further enforces the interrelated nature of a number of the design elements. For example, cl. 3.3 - tree canopy & deep soil area and cl. 4.12 - landscape design are inter-related as is cl. 3.2 - orientation and cl. 4.1 - solar & daylight access.

It is also noted that the variations proposed are considered to be the result of a number of site constraints, namely the battleaxe lot shape and its orientation. Whilst the development of multiple dwellings is not excluded on R40 battleaxe lots under the current local planning framework, it undoubtedly adds an additional level of complexity to its planning and design. The primary constraint is that where a standard rectangular lot with direct road frontage has minimal area set aside from vehicular access and egress, a battleaxe lot has a notable percentage of the lot restricted for this sole purpose. Put simply, the effective lot area is notably reduced on a battleaxe lot compared to a standard rectangular lot. Based on this approach, if one were to calculate the plot ratio of the subject proposal based on the effective lot area which is approximately 904.49sqm - refer Figure 6, the resultant plot ratio of the development is in-fact 0.649 being a 0.049 or a 44.5sqm variation in excess of the acceptable outcome criteria.

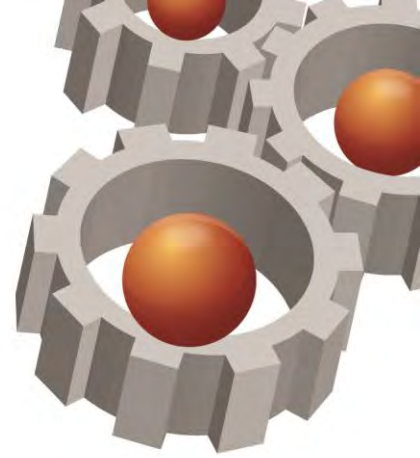


**Figure 6 - Effective Lot Area**

This resultant effective lot area plot ratio figure is considered to explain the cumulative impacts that result from the proposed building being "squeezed" into the effective lot area. Put simply, as land is taken up to accommodate more building, this has come at the expense of other design elements, namely tree canopy & DSA, landscaping, solar & daylight access and orientation as discussed above.

Where departures to any design element is proposed, SPP7.3 Vol 2 provides for development incentives for community benefit to be offered in lieu. Cl. 2.8 of SPP7.3 Vol 2 explains the intent of development incentives as follows:

- *Development incentives are a method through which additional development potential or flexibility (such as additional plot ratio and/or building height) is offered in exchange for tangible community benefit, such as public amenities, culture and recreation facilities or affordable and/or accessible housing.*
- *The cost and value of the community benefit can be objectively measured and assessed as the local government will need to determine whether the incentive is*



*sufficient to attract investment in the desired community benefit, and also demonstrate that the value of the community benefit is broadly commensurate with the additional development entitlement.*

- *Ideally development incentives would be confined to planned local areas included in local planning schemes, activity centre plans and/or structure plans, and/or limited to a focussed area or specific site that is identified for community infrastructure*

SPP7.3 Vol 2 provides the following examples of community benefit that may be considered in exchange for additional development potential or flexibility:

- Affordable housing.
- Dwelling diversity.
- Heritage.
- Retention of vegetation.
- Public facilities.
- Energy efficient design.
- Water conservation.

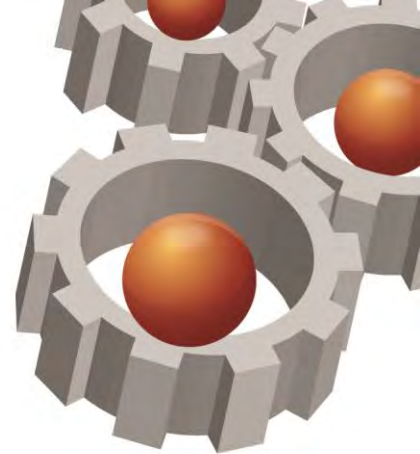
In this instance, the proposal is not considered to deliver an adequate level of community benefit to warrant the exercise of discretion towards the variations being sought to the aforementioned design elements.

Based on the assessment conducted, it is considered that the proposal does not satisfactory address a number of key design elements and their element objectives and as such, does not warrant approval.

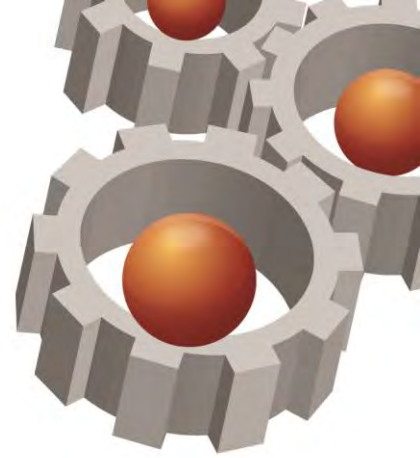
### **Recommendation:**

**That Council REFUSES under clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015*, the application for development approval, dated 21 April 2020 submitted by Mark Anthony Design for the proposed seven multiple dwellings at Lot 945 (12) Northwood Way, Kallaroo based on the following reasons:**

- 1. The proposal does not satisfy element objectives of State Planning Policy 7.3 Volume 2 - Apartments with regard to Element 2.4 'side and rear setbacks'. It is considered that the proposed lot boundary setbacks contribute towards adverse building bulk and lack of building separation to adjoining properties, in particular due to the associated inadequacy of being able to provide sufficient tree canopy and deep soils areas within the building setback areas.**



2. The proposal does not satisfy element objectives of State Planning Policy 7.3 Volume 2 - Apartments with regard to Element 3.2 'orientation'. It is considered that the orientation of the development compromises the amenity levels of units by way of not satisfactorily achieving direct sunlight to outdoor living areas and living rooms.
3. The proposal does not satisfy element objectives of State Planning Policy 7.3 Volume 2 - Apartments with regard to Element 3.3 'tree canopy and deep soil areas' and Element 4.12 'landscape design'. The proposal does not provide sufficient DSA area to accommodate the required number of medium and large trees and thereby achieve an appropriate level of canopy cover within the subject site.
4. The proposal does not satisfy element objectives of State Planning Policy 7.3 Volume 2 - Apartments with regard to Element 4.1 'solar and daylight access'. It is considered that the orientation of the units do not achieve north-facing living rooms and primary outdoor living areas in order to obtain atleast 2-hours of direct sunlight between 9am and 3pm on 21 June.
5. Having regard to cl. 2.8 'development incentives for community benefit' of State Planning Policy 7.3 Volume 2 - Apartments, the development does not demonstrate a level of design excellence commensurate to the proposed variations sought to the element objectives associated with 2.4 - side and rear setbacks, 3.2 - orientation, 3.3 - tree canopy and deep soil areas, 4.12 - landscape design and, 4.1 - solar and daylight access.
6. The development does not satisfy the following design principles of State Planning Policy 7.0 'Design of the Built Environment':
  - Landscape quality;
  - Built form and scale;
  - Sustainability;
  - Amenity;
7. Approval of the proposed development being contrary to Schedule 2, Clause 67 of the *Planning and Development (Local Planning Schemes) Regulations, 2015* with particular reference to the following subclauses:
  - (b) *the requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been*

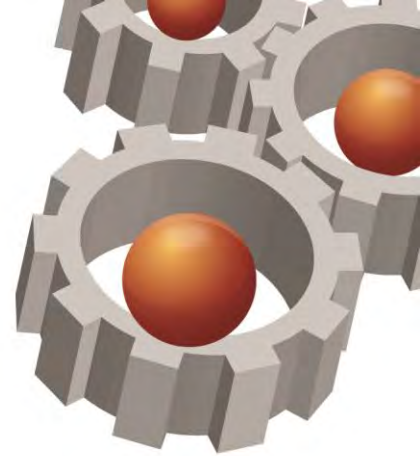


*advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or. any other proposed planning instrument that the local government is seriously considering adopting or approving;*

- (c) any approved State planning policy;*
- (m) the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;*
- (n) the amenity of the locality including the following —*
  - i. environmental impacts of the development;*
  - ii. the character of the locality;*
  - iii. social impacts of the development;*
- (p) whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;*
- (zb) any other planning consideration the local government considers appropriate.*



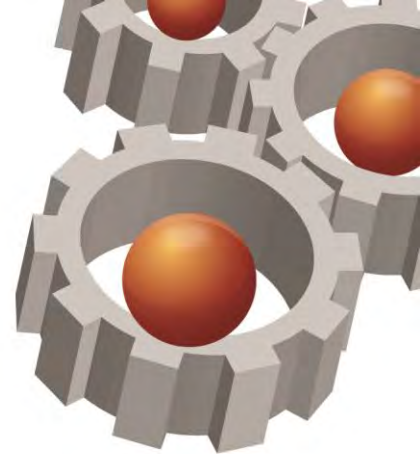
**DYNAMIC PLANNING**  
AND DEVELOPMENTS



**ATTACHMENT 1:**  
Assessment Sheet



**DYNAMIC PLANNING**  
AND DEVELOPMENTS



**ATTACHMENT 2:**  
Response to Submissions (Objections)

State Planning Policy 7.3

# Residential Design Codes

## Volume 2 - Apartments

Gazetted on 24 May 2019

### Assessment Sheet

Prepared by:



**DYNAMIC PLANNING**  
AND DEVELOPMENTS

#### History and Status of this Document

Revision	Date issued	Prepared by	Revision type
Rev 1	16 Jan 2020	RC	Issued for review
Rev 2	21 May 2020	HS	OCM
Rev 3	2 June 2020	HS	OCM

#### Document Printed

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**Author/s**

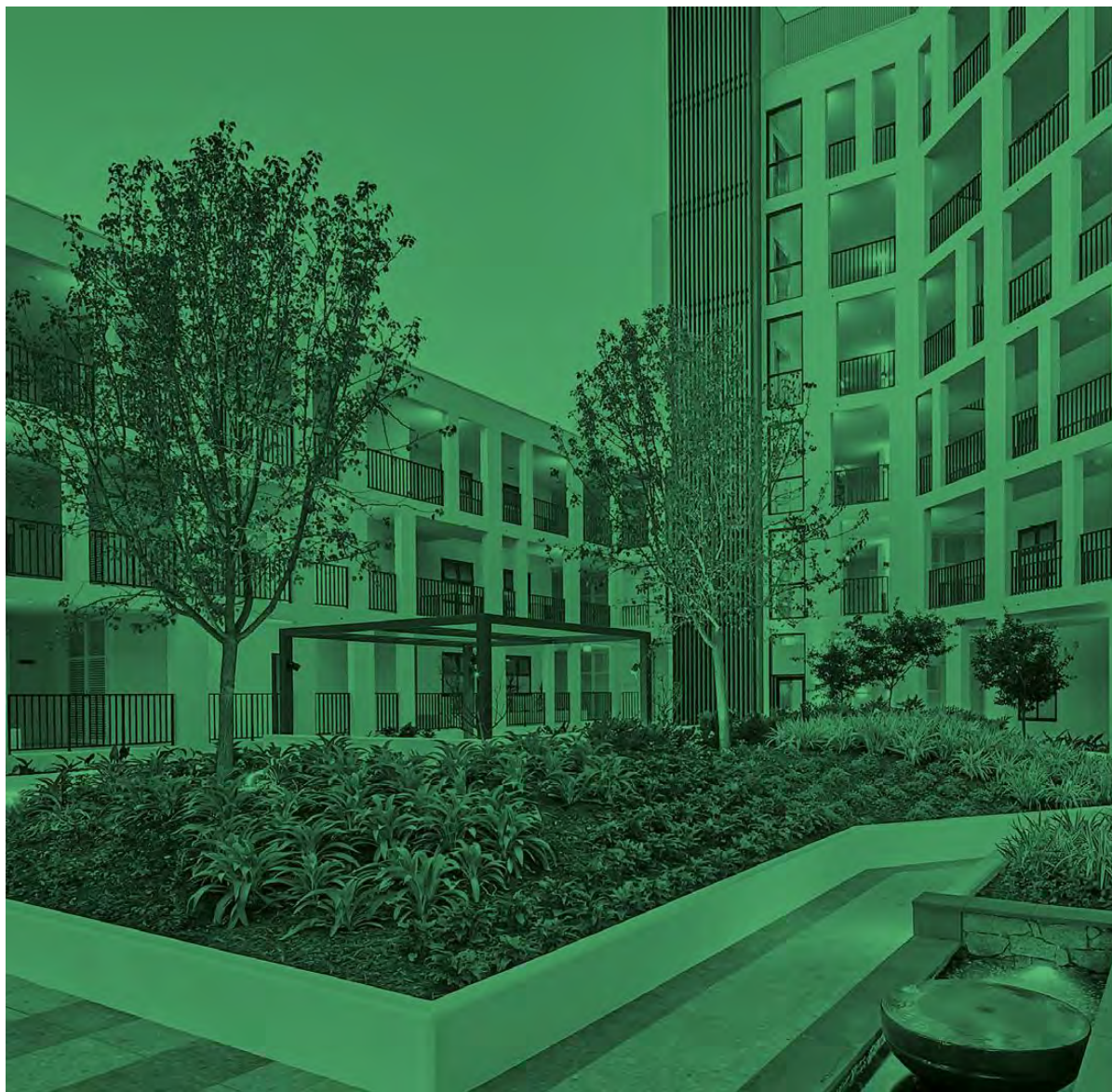
**Document Version**

2 June 2020

200602 SPP7.3 Northwood Way KALLAROO rev 3

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Rev 3



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## DEVELOPMENT ASSESSMENT

### ADDITIONS TO, OR NEW MULTIPLE DWELLINGS IN AREAS CODED R40 AND ABOVE, WITHIN MIXED USE DEVELOPMENT & ACTIVITY CENTRES

**Assessment Date:** Tuesday, 2 June 2020

#### General Information:

<b>Description of Proposal</b>	Seven Multiple Dwellings	
<b>Address:</b>	Lot 945 (No. 12) Northwood Way, Kallaroo	
<b>MRS Zoning / Reservation</b>	Urban	
<b>Zoning / R-Code:</b>	Residential R20/R40	
<b>Land Area:</b>	1,017sqm	
<b>Title Info:</b>	Strata	<input type="checkbox"/>
	Survey Strata	<input type="checkbox"/>
	Built Strata	<input type="checkbox"/>
	Green Title/Freehold	<input checked="" type="checkbox"/>
	Easement on Property?	<input type="checkbox"/>
	Easement on Adjoining Property?	<input type="checkbox"/>
<b>Features</b>	Tree/s on verge	No
	Tree/s on property	Yes - various small trees
	Slope of Land	Generally flat
	Verge infrastructure	Light pole x 1 Sewer manhole x 1

#### Statutory & Strategic Considerations

<b>Local Planning Policies</b>	<ul style="list-style-type: none"> <li>Residential Development Local Planning Policy</li> <li>Environmental Sustainable Design Policy</li> </ul>
<b>Structure Plans</b>	N/A
<b>Municipal Heritage Inventory?</b>	No
<b>On or abutting Primary/Regional Road Reservation?</b>	No but within 3m of 'Other Regional Roads' (Whitfords)



DYNAMIC PLANNING  
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	Ave)
<b>Bushfire Prone Area?</b> (If yes see below)	No
<ul style="list-style-type: none"><li>- Is the proposal for grouped/multiple dwellings?</li><li>- Is the proposal for a dwelling/additions/ancillary dwelling on a lot greater than 1100sqm?</li></ul>	No
<b>Planning Control Area</b>	N/A
<b>Further Comment:</b> n/a	

**Public Consultation:**

Required. Undertaken between 4 May 2020 to 19 May 2020

# 2

## Primary controls

Part 2 provides the Primary Controls that relate to R-Codings with guidance and discussion for local governments seeking to vary the Primary Controls of this policy to suit local context through their **local planning frameworks**.

Clause 2.2 – Building Height		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A2.2.1</b> Development complies with the building height limit (storeys) set out in: <ol style="list-style-type: none"> <li>As per Table 2.1 two (2) storey (9m) <b>OR</b>;</li> <li>Local Planning Framework if applicable. Not Applicable.</li> </ol>	6.88m	Yes
<b>Element Objectives:</b> <b>O 2.2.1</b> The height of <b>development</b> responds to the desired future scale and character of the <b>street</b> and local area, including existing <b>buildings</b> that are unlikely to change. <b>O 2.2.2</b> The height of <b>buildings</b> within a <b>development</b> responds to changes in topography. <b>O 2.2.3</b> <b>Development</b> incorporates articulated roof design and/or roof top <b>communal open space</b> where appropriate. <b>O 2.2.4</b> The height of <b>development</b> recognises the need for <b>daylight</b> and <b>solar access</b> to adjoining and nearby residential development, <b>communal open space</b> and in some cases, public spaces.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance PG2.2.1 to 2.2.11</b> : Not required in this instance. Proposal satisfies the Acceptable Outcome criteria and is of a building height consistent with other residential developments in the immediate locality.		

Clause 2.3 – Street Setbacks		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A2.3.1</b> Development complies with the street setback set out in: <ol style="list-style-type: none"> <li>As per Table 2.1. N/A <b>OR</b>;</li> <li>Local Planning Framework (RDLPP):               <ul style="list-style-type: none"> <li>2m min and 4m average for Primary Street</li> <li>1.5m for Secondary Street incl truncation</li> </ul> </li> </ol>	Primary Street - n/a (battleaxe lot)  Secondary Street - n/a	n/a  n/a
<b>Element Objectives:</b>		

- O 2.3.1** The **setback** of the **development** from the **street** reinforces and/or complements the existing or proposed **landscape character** of the street.
- O 2.3.2** The **street setback** provides a clear transition between the public and private realm.
- O 2.3.3** The **street setback** assists in achieving visual privacy to **apartments** from the street.
- O 2.3.4** The **setback** of the **development** enables **passive surveillance** and outlook to the **street**.

Justification against **Element Objectives** having regard to **Planning Guidance PG2.3.1 to 2.3.4:**

n/a

## Clause 2.4 – Side and Rear Setbacks

Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A2.4.1</b> Development complies with the side and rear setbacks set out in: Does the building exceed 16m in length?</p> <ul style="list-style-type: none"> <li>o Yes. Apply (2) <b>*Yes to North, South &amp; West elevations</b></li> </ul> <p>1. As per Table 2.1 – Minimum required for <b>East Elevation:</b></p> <ul style="list-style-type: none"> <li>o R40: 2m side. 3m rear.</li> </ul> <p>-----</p> <p>2. As per Table 2.1 – Minimum Average required:</p> <ul style="list-style-type: none"> <li>o R40: 2.4m side &amp; rear.<b>OR</b></li> </ul> <p>3. Local Planning Framework if applicable</p> <ul style="list-style-type: none"> <li>• RDLPP – boundary wall permitted in accordance with: <ul style="list-style-type: none"> <li>o 11.01 length</li> <li>o 3.5m high</li> <li>o 3m average height</li> </ul> </li> </ul> <p><b>Note:</b> <sup>1</sup>Wall may be built up to a lot boundary, where it abuts an existing or simultaneously constructed wall of equal or greater proportions</p> <p><sup>2</sup>Where the subject site and an affected adjoining site are subject to different density codes, the length and height of any boundary wall on the boundary between them is determined by reference to the lower density code</p>	<p><b>Eastern Boundary (2.0m)</b> Ground Floor 2.5m First Floor 2.0m</p> <p>-----</p> <p><b>Southern Boundary (2.4m)</b> <b>Ground Floor 2.25m minimum</b>  <b>First Floor 1.6m (min) to 2.5m (max)</b></p> <p><b>Western Boundary (2.4m)</b> <b>Ground Floor 2.0m</b>  <b>First Floor 1.5m (min) to 1.8m (max)</b></p> <p><b>Northern Boundary (2.4m)</b> <b>Ground Floor 1.92m (min)</b>  <b>First Floor 1.74m (min)</b></p>	<p>Yes Yes</p> <p>-----</p> <p><b>No - refer Element Objective assessment below</b> <b>No - refer Element Objective assessment below</b></p> <p><b>No - refer Element Objective assessment below</b> <b>No - refer Element Objective assessment below</b></p> <p><b>No - refer Element Objective assessment below</b> <b>No - refer Element Objective assessment below</b></p>
<p><b>A2.4.2</b> Development is setback from the boundary in order to achieve the</p>	Refer assessment under section 2.7, 3.3, 3.5 & 4.1.	Refer assessment under section 2.7,

Objectives outlined in 2.7 <i>Building separation</i> , 3.3 <i>Tree canopy and deep soil areas</i> , 3.5 <i>Visual privacy</i> & 4.1 <i>Solar and daylight access</i> .		3.3, 3.5 & 4.1.
<p><b>Element Objectives:</b></p> <p><b>O 2.4.1</b> <i>Building boundary setbacks provide for adequate separation between neighbouring properties.</i></p> <p><b>O 2.4.2</b> <i>Building boundary setbacks are consistent with the existing <b>streetscape</b> pattern or the desired streetscape character.</i></p> <p><b>O 2.4.3</b> <i>The <b>setback of development</b> from side and rear boundaries enables retention of existing trees and provision of <b>deep soil areas</b> that reinforce the <b>landscape character</b> of the area, support tree canopy and assist with <b>stormwater</b> management.</i></p> <p><b>O 2.4.4</b> <i>The <b>setback of development</b> from side and rear boundaries provides a transition between <b>sites</b> with different land uses or intensity of development.</i></p>		
<p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance PG2.4.1 to 2.4.6:</b></p> <p>The proposal has been assessed against and is deemed to satisfy Element Objectives 2.4.1, 2.4.2 and 2.4.4 on the following basis:</p> <ul style="list-style-type: none"> <li>The minor side setback variations presented are considered to achieve adequate separation and ameliorate building bulk as walls are well articulated and comprise a range of major and minor openings, building materials and colours. The overall building height of 6.88m in lieu of 9.0m / 2-storey that is acceptable under clause 2.2 also assists in ameliorating any adverse building bulk created by the side setback variations sought.</li> <li>Side setbacks are generally consistent with other residential developments in the immediate locality. Established residential development in the locality typically feature side setbacks of between 1.0m to 2.0m which is comparable to the subject proposal.</li> <li>The transition between the proposed multiple dwelling and adjoining single houses is appropriately addressed. Specifically, the eastern setback satisfies the Acceptable Outcome criteria whilst the majority of the northern setback achieves a setback above and beyond that required under the Acceptable Outcome criteria.</li> </ul> <p>The proposal has been assessed against and is deemed to <b>NOT</b> satisfy Element Objective 2.4.3 on the following basis:</p> <ul style="list-style-type: none"> <li>Reduced / variations to the northern setback contribute towards adverse building bulk to the adjoining neighbours. It also contributes towards insufficient deep soil area (cl.3.3) landscaping which would provide additional separation / screening of the building bulk.</li> <li>In the location of deep soil areas, building setbacks are deemed to be insufficient, creating likely conflict between growth of mature medium or large trees / canopy and the building structure - refer Figure below illustrating location of roof / building structure and indicative tree canopies.</li> </ul>		

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A2.5.1</b> Development complies with the plot ratio requirements set out in: <ol style="list-style-type: none"> <li>As per Table 2.1 R40 - 0.6 (610.20sqm)</li> </ol> <b>OR,</b> <ol style="list-style-type: none"> <li>Local Planning Framework if applicable [N/A]</li> </ol>	Ground Floor - 150.51sqm First Floor - 436.69sqm <b>Total:</b> 587.20sqm or 0.577	Yes
<b>Element Objectives:</b> <b>O 2.5.1</b> The overall bulk and scale of <b>development</b> is appropriate for the existing or planned character of the area.		

Justification against **Element Objectives** having regard to **Planning Guidance PG2.5.1 to 2.5.4:**

Not required in this instance. Proposal satisfies the Acceptable Outcome criteria and is of a building bulk and scale that is consistent with other residential developments in the immediate locality.

### Clause 2.6 – Building Depth

Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A2.6.1</b> Developments that comprise single aspect apartments:</p> <p>Does the proposal have single-aspect apartments?</p> <ul style="list-style-type: none"> <li>○ No. Apply (2)</li> </ul> <p>1. Max building depth – 20m</p> <p>2. As per clause 4.1 <i>Solar &amp; Daylight Access</i> and 4.2 <i>Natural Ventilation</i>.</p>	Refer assessment in Clause 4.1 and 4.2.	n/a - refer clause 4.1 & 4.2 assessment
<p><b>Element Objectives:</b></p> <p><b>O 2.6.1</b> <i>Building depth</i> supports <b>apartment</b> layouts that optimise <b>daylight</b> and <b>solar access</b> and <b>natural ventilation</b>.</p> <p><b>O 2.6.2</b> <i>Articulation of building form</i> to allow adequate access to <b>daylight</b> and <b>natural ventilation</b> where greater <b>building depths</b> are proposed.</p> <p><b>O 2.6.3</b> <i>Room depths and/or ceiling heights</i> optimise <b>daylight</b> and <b>solar access</b> and <b>natural ventilation</b>.</p>		
<p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance PG2.6.1 to 2.6.7:</b></p> <p>Not applicable.</p>		

### Clause 2.7 – Building Separation

Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A2.7.1</b> Development complies with the separation requirements set out in Table 2.7:</p> <p>1. Within site boundary:</p> <ul style="list-style-type: none"> <li>○ 4-storey (12m): Habitable Rooms &amp; Balconies = 12m;</li> <li>○ 4-storey (12m): Habitable Rooms &amp; non-Habitable</li> </ul>	Development is a single building form / mass. As such, cl. 2.7 is not applicable.	Yes



<p>Rooms = 7.5m; and,</p> <ul style="list-style-type: none"> <li>○ 4-storey (12m): Between non-habitable Rooms = 4.5m.</li> </ul> <p>2. To adjoining properties:</p> <ul style="list-style-type: none"> <li>○ &lt;4-storey (12m) - Refer clause 2.4 <i>Side &amp; Rear Setbacks</i> and clause 3.5 <i>Visual Privacy</i> assessment.</li> </ul> <p><b>Note:</b></p> <p><sup>1</sup>Distances apply from major openings of rooms, or the inside of balustrading of balconies.</p> <p><sup>2</sup>Average dimensions may be applied subject to major openings meeting other requirements for privacy, daylight and the like.</p>	<p>Refer assessment in Clause 2.4 and 3.5.</p>	<p>Refer cl. 2.4 and 3.5</p>
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**Element Objectives:**

**O 2.7.1** *New **development** supports the desired future **streetscape** character with spaces between **buildings**.*

**O 2.7.2** ***Building** separation is in proportion to building height.*

**O 2.7.3** ***Buildings** are separated sufficiently to provide for residential **amenity** including visual **and acoustic privacy**, **natural ventilation**, **sunlight** and **daylight** access and outlook.*

**O 2.7.4** *Suitable areas are provided for **communal** and **private open space**, **deep soil areas** and **landscaping** between **buildings**.*

Justification against **Element Objectives** having regard to **Planning Guidance PG2.7.1 to 2.7.4:**

The proposal has been assessed against and is deemed to satisfy Element Objectives 2.7.1, 2.7.2 and 2.7.3. However, the proposal has been assessed against and is deemed to **NOT** satisfy Element Objective 2.7.4 on the following basis:

- For reasons outlined under cl.2.4 above being:
  - Reduced / variations to the northern setback contribute towards adverse building bulk to the adjoining neighbours. It also contributes towards insufficient deep soil area (cl.3.3) landscaping which would provide additional separation / screening of the building bulk.
  - In the location of deep soil areas, building setbacks are deemed to be insufficient, creating likely conflict between growth of mature medium or large trees / canopy and the building structure - refer Figure illustrating location of roof / building structure and indicative tree canopies.

**Clause 2.8 – Development Incentives for community benefit**

- *Development incentives are a method through which additional development potential or flexibility (such as additional plot ratio and/or building height) is offered in exchange for tangible community benefit, such as public amenities, culture and recreation facilities or affordable and/or accessible housing.*
- *The cost and value of the community benefit can be objectively measured and assessed as the local government will need to determine whether the incentive is sufficient to attract investment in the desired community benefit, and also demonstrate that the value of the community benefit is broadly commensurate with the additional development entitlement.*
- *Ideally development incentives would be confined to planned local areas included in local planning schemes, activity centre plans and/or structure plans, and/or limited to a focussed area or specific site that is identified for community infrastructure*

**Planning Objectives:**

1. *Development incentives should be compatible with the objectives of this policy, the local planning scheme, applicable structure plans, local development plans and local planning policies.*
2. *Incentives should be chosen and weighted to reflect local priorities.*
3. *Incentive-based provisions should provide clearly defined and measurable outcomes required to satisfy community benefit criteria.*

4. *Incentives should be weighted so that the community outcomes are balanced with the benefit the developer achieves from the additional development allowed through varying the relevant development standard.*
5. *Application of incentives should not result in adverse impacts on adjoining properties or the existing or desired streetscape character.*

**Planning Guidance:**

**PG 2.8.1** The following are examples of community benefit that may be considered in exchange for additional development potential or flexibility incorporated into a local planning scheme, local development plan or local planning policy.

- **Affordable housing:** development commits to deliver affordable dwellings in partnership with an approved housing provider or not-for-profit organisation recognised by the Housing Authority.
- **Dwelling diversity:** where providing a dwelling type identified as a priority by the local government, such as aged and dependent dwellings, universal access dwellings, one-bedroom apartments, key-worker dwellings or other innovative housing models to meet demand.
- **Heritage:** where a proposal delivers an exceptional outcome with regard to conserving and/or enhancing a place listed on the State Register of Heritage Places, a local planning scheme register or Local Government Heritage Inventory under the *Heritage of Western Australia Act 1990* (or the equivalent under the *Heritage Act 2018*) or a place that is located within a heritage area designated under the local planning scheme.
- **Retention of vegetation:** where significant mature or native vegetation is retained within a development site in excess of the Acceptable Outcomes at 3.3 *Tree canopy and deep soil areas*.
- **Public facilities:** development includes one or more of the following public facilities or amenities where identified as a priority by the local government: public open space
  - public car parking
  - public pedestrian access ways and site linkages
  - provision of public facilities on private land, such as cultural facilities, public toilets, change rooms, end of trip facilities, meeting places, public pre-school or child care facilities and associated open space

Consider whole of life costs including maintenance where public facilities are proposed.
- **Energy efficient design:** proposal demonstrates exceptional energy efficient design and a significant reduction in energy consumption.
- **Water conservation:** where the proposal demonstrates exceptional water management and conservation and a significant reduction in mains water use.

**PG 2.8.2** When preparing planning provisions, local governments should give consideration to the weight that may be applied to individual elements and setting an 'upper cap' for allowable additional development. Weighting should be applied according to the local governments' desired outcomes and the amount of community benefit provided in exchange for the additional development potential or flexibility.

Justification against **Element Objectives** having regard to **Planning Guidance PG2.8.1 to 2.8.2:**

Does the proposal seek any variations to plot ratio, building height or other criteria contained under State Planning Policy 7.3 Volume 2 - Apartments?

- **Yes. Variations are sought to the following Acceptable Outcome criteria which are considered to warrant the exchange with added development incentives:**
  - cl.2.4 - side and rear setbacks;
  - cl. 3.3 - tree canopy & deep soil areas;
  - cl. 4.1 - solar & daylight access; and,
  - cl.4.12 - landscape design.

Information regarding delivery of any of the abovementioned community benefits or others have not been provided.

# 3

## Siting the building

Part 3 sets out key considerations for the siting of **apartments**. It includes analysis and response to **site** context, interface with neighbours and the **public domain**, and measures to achieve quality **open spaces** and maximise residential **amenity**. It is to be used by all parties designing, submitting or assessing development proposals.


Clause 3.1 – Site Analysis and Design Response (Checklist)	
Design Guidance	Provided?
<b>DG 3.1.1</b> A written and illustrated site analysis should be provided that demonstrates how the design response is informed by the site analysis and responds to surrounding context.	Yes.
<b>DG 3.1.2</b> The key elements of a site analysis include: <ul style="list-style-type: none"> <li>Location plan – showing the broad community context including access to transport, employment, schools, shopping and services. This may include aerial photography.</li> <li>Local context plan showing the features, attributes and character of the neighbourhood</li> <li>Site survey plan showing detailed site features including topography, vegetation, services and existing development</li> <li>Streetscape (photos and key features)</li> <li>For larger projects, simple three-dimensional modelling of the built form is encouraged</li> <li>Consideration of local planning instruments that relate to the site</li> <li>Incorporation of expert advice such as cultural, heritage, landscape, contamination, geotechnical and arboriculture</li> <li>Analysis and interpretation.</li> </ul>	Yes  Yes Yes Yes Yes Yes Yes Yes
<b>DG 3.1.3</b> Local planning instruments applying to the development site should be considered and understood as part of the site analysis process.	Yes
<b>DG 3.1.4</b> Depending on site factors, the site design response may require consultant advice for cultural, heritage, landscape, contamination, geotechnical and arboriculture matters. Early discussions with the planning authority may assist in identifying the relevant factors and specific requirements.	Yes
<b>DG 3.1.5</b> Where design review and/or pre-lodgement enquiry processes are available, it is recommended that early presentations of site analysis and design responses are conducted to achieve timely and effective resolution of any major design issues that could influence the development approval.	Yes

Clause 3.2 – Orientation		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A3.2.1</b> Buildings on street or public realm frontages are oriented to face the public realm and incorporate direct access from the street.	<ul style="list-style-type: none"> <li>No direct frontage afforded to Northwood Way due to battleaxe lot configuration.</li> <li>Major openings and balconies face Whitfords Avenue and Belrose Park.</li> <li>Pedestrian access provided to and from Whitfords Avenue and Belrose Park.</li> </ul>	Yes
<b>A3.2.2</b> Buildings that do not have frontages to streets or public realm		

are oriented to maximise northern solar access to living areas.	The proposal has been designed to provide a frontage / aspect towards Whitfords Avenue as well as Belrose Park which is appropriate to ensure a degree of passive surveillance is achieved as well as compliance with A3.2.1 above. However, this design approach has been at the expense of reducing northern orientation to the majority of units.	No - refer Element Objective assessment below
<b>A3.2.3</b> Development in climate zones 4, 5 and 6 shall be designed such that the shadow cast at midday on 21st June onto any adjoining property does not exceed: o R30 to R40 = 35%	Overshadowing to Whitfords Avenue.	Yes
<b>A3.2.4</b> Where adjoining sites are coded R40 or less, buildings are oriented to maintain 4 hours per day solar access on 21 June for existing solar collectors on neighbouring sites.	No solar collectors affected	Yes
<b>Note:</b> <sup>1</sup> Where a development site shares its southern boundary with a lot, and that lot is bound to the north by other lot(s), the limit of shading at A 3.2.3 shall be reduced proportionally to the percentage of the affected properties northern boundary that abuts the development site. (Refer to Figure A7.2 in Appendix 7)		
<b>Element Objectives:</b> <b>O 3.2.1 Building layouts respond to the streetscape, topography and site attributes while optimising solar and daylight access within the development.</b> <b>O 3.2.2 Building form and orientation minimises overshadowing of the habitable rooms, open space and solar collectors of neighbouring properties during mid-winter.</b>		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.2.1 to DG3.2.3:</b> The proposal has been assessed against and is deemed to satisfy Element Objectives 3.3.1, 3.2.3 and 3.2.4. However, the proposal has been assessed against and is deemed to <b>NOT</b> satisfy Element Objective 3.2.2 on the following basis: <ul style="list-style-type: none"> <li>The proposal does not optimise solar and daylight access within the development. Detailed reasons are provided further below under cl.4.1: solar &amp; daylight access.</li> </ul>		

Clause 3.3 – Tree Canopy & Deep Soil Areas		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A3.3.1</b> Retention of existing trees on site o Are there any existing trees which meet the following: <ul style="list-style-type: none"> <li>Healthy specimens;</li> <li>Not a State or Local weed;</li> <li>4.0m high or more;</li> <li>Trunk diameter &gt;160mm measured 1m from ground;</li> <li>Average canopy diameter of 4m.</li> </ul> <b>Yes</b> - 4.0 tall tree located on north-eastern corner of subject lot - refer Figure.	All existing trees proposed to be removed.	No - refer Element Objective assessment below



		
<b>A3.3.2</b> Removal of existing trees that meet A3.3.1 above is supported by an arboriculture report.	Arboriculture report not provided.	No - refer Element Objective assessment below
<b>A3.3.3</b> The development is sited and planned to have no detrimental impacts on, and to minimise canopy loss of adjoining trees.	All existing trees proposed to be removed.	No - refer Element Objective assessment below
<b>A3.3.4</b> 1. DSA (landscape area) = <b>10%</b> or <b>7%</b> of site area if existing tree/s retained. 10% = 101.7sqm  2. Tree DSA areas are provided in accordance with Table 3.3a: ○ Site Area >1000sqm = 1 large tree, 1 medium tree per 400sqm above 1000sqm OR 1 large tree per 900sqm above 1000sqm & small trees to suit  <b>Note:</b> <sup>1</sup> DSA are co-located with existing trees for retention and/or adjoining trees or in location that is conducive to tree growth and suitable for communal open space. <sup>2</sup> Minimum requirement for trees includes retained or new trees Refer Table 3.3b for tree sizes	Total DSA (landscape area) - 241.1sqm  3 x Tree DSA's proposed: • 7.6sqm, 26.4sqm & 19.8sqm = 53.8sqm  Areas provided equivalent / only adequate for 3 x small trees.	Yes  No - refer Element Objective assessment below

<p><b>A3.3.5</b></p> <p>Landscaping includes existing and new trees with shade producing canopies in accordance with Tables 3.3a and 3.3b:</p> <table><tr><th>Tree size</th><th>Canopy diameter</th><th>height</th></tr><tr><td>Small Tree</td><td>4-6m</td><td>4-8m</td></tr><tr><td>Medium</td><td>6-9m</td><td>8-12m</td></tr><tr><td>Large</td><td>&gt;9m</td><td>&gt;12m</td></tr></table>	Tree size	Canopy diameter	height	Small Tree	4-6m	4-8m	Medium	6-9m	8-12m	Large	>9m	>12m	<table><tr><th>Tree type</th><th>DSA per tree</th><th>DSA dimension</th><th>Pot size</th><th>Proposed</th></tr><tr><td>Small</td><td>9m<sup>2</sup></td><td>3m x 3m</td><td>100L</td><td>x 3</td></tr><tr><td>Medium</td><td>36m<sup>2</sup></td><td>6m x 6m</td><td>200L</td><td>Nil</td></tr><tr><td>Large</td><td>64m<sup>2</sup></td><td>8m x 8m</td><td>500L</td><td>Nil</td></tr></table>	Tree type	DSA per tree	DSA dimension	Pot size	Proposed	Small	9m <sup>2</sup>	3m x 3m	100L	x 3	Medium	36m <sup>2</sup>	6m x 6m	200L	Nil	Large	64m <sup>2</sup>	8m x 8m	500L	Nil	<p>No - refer Element Objective assessment below</p>
Tree size	Canopy diameter	height																																
Small Tree	4-6m	4-8m																																
Medium	6-9m	8-12m																																
Large	>9m	>12m																																
Tree type	DSA per tree	DSA dimension	Pot size	Proposed																														
Small	9m <sup>2</sup>	3m x 3m	100L	x 3																														
Medium	36m <sup>2</sup>	6m x 6m	200L	Nil																														
Large	64m <sup>2</sup>	8m x 8m	500L	Nil																														
<p><b>A3.3.6</b></p> <p>Max. permeable paving / decking within DSA = 20% &amp; does not inhibit planting and growth of trees.</p>	<p>No permeable paving proposed.</p>	<p>Yes</p>																																
<p><b>A3.3.7</b></p> <p>Where required DSA cannot be provided at-grade, planting on structures to be at <b>two times</b> shortfall.</p>	<p>N/A</p>	<p>Yes</p>																																
<p><b>Element Objectives:</b></p> <p><b>O 3.3.1</b> <i>Site planning maximises retention of existing healthy and appropriate and protects the viability of <b>adjoining trees</b>.</i></p> <p><b>O 3.3.2</b> <i>Adequate measures are taken to improve tree canopy (long term) or to offset reduction of tree canopy from <b>pre-development</b> condition.</i></p> <p><b>O 3.3.3</b> <i><b>Development</b> includes <b>deep soil areas</b>, or other infrastructure to support planting on structures, with sufficient area and volume to sustain healthy plant and tree growth.</i></p>																																		
<p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.3.1 to DG3.3.7</b>:</p> <p>The proposal has been assessed against and is deemed to <b>NOT</b> satisfy Element Objective 3.3.2 and 3.3.3 on the following basis:</p> <ul style="list-style-type: none"><li>Site does not retain any trees and much of the proposed Tree DSA areas do not meet the minimum requirements to support a medium or large tree. Supporting information outlining whether reduced DSA is suitable for tree species selected has not been provided.</li><li>Potential conflict of tree canopies with building structures and roofs as outlined under cl.2.4 / refer figure below.</li></ul>																																		

Clause 3.4 – Communal Open Space		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A3.4.1</b> Developments include communal open space (COS) in accordance with Table 3.4: <ul style="list-style-type: none"> <li>○ up to 10 dwellings = informal seating within DSA or landscape areas</li> </ul>	Informal seating has been provided next to DSA area abutting Unit 1.	Yes
<b>A3.4.2</b> COS on the ground floor or on floors serviced by lifts accessible from primary street entry.	Communal open space on the ground floor.	Yes
<b>A3.4.3</b> 50% direct sunlight to at least one COS for a min. two (2) hours between 9am and 3pm on 21 June.	COS is north-facing and will achieve <2hours of direct sunlight.	Yes

<b>A3.4.4</b> COS is co-located with DSA and/or planting on structure areas and/ or co-indoor communal spaces.	DSA and COS has been co-located.	Yes
<b>A3.4.5</b> COS is separated or screened from bins, vents, condenser units, noise sources, vehicle circulation areas etc.	COS situated independent of all service areas.	Yes
<b>A3.4.6</b> COS is well-lit / open to passive surveillance.	COS achieve adequate passive surveillance from proposed dwellings on site and from resident circulation areas.	Yes
<b>A3.4.7</b> COS designed & oriented to minimise the impacts of noise, odour, light-spill and overlooking on the habitable rooms and private open spaces within the site <b>AND</b> of neighbouring properties.	COS is adequately separate from neighbouring properties. <b>COS can overlook into Unit 1 bedroom major opening.</b>	Yes <b>No</b>
<b>Element Objectives:</b> <b>O 3.4.1</b> Provision of quality <b>communal open space</b> that enhances resident <b>amenity</b> and provides opportunities for <b>landscaping</b> , tree retention and <b>deep soil areas</b> . <b>O 3.4.2</b> <b>Communal open space</b> is safe, <b>universally accessible</b> and provides a high level of <b>amenity</b> for residents. <b>O 3.4.3</b> <b>Communal open space</b> is designed and oriented to minimise impacts on the <b>habitable rooms</b> and <b>private open space</b> within the <b>site</b> and of neighbouring properties.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.4.1 to DG3.4.7</b> : The proposal has been assessed against and is deemed to satisfy Element Objectives 3.4.1, 3.4.2 and 3.4.3 on the following basis: <ul style="list-style-type: none"> <li>Location and size of COS is deemed adequate based on the scale of the development (i.e. &lt;10 units).</li> <li>The COS will be universally accessible and provides an amenity for residents. In this instance, the COS will supplement the adjoining Belrose Park which provides an additional level of amenity for future occupants.</li> <li>Subject to unit 1 major opening being amended to avoid direct view of the COS, the COS will have minimal impact to habitable rooms and private open spaces within the subject site as of neighbouring properties.</li> </ul>		

<b>Clause 3.5 – Visual Privacy</b>		
<b>Acceptable Outcome</b>	<b>Proposed</b>	<b>Complies (Yes / No)</b>
<b>A3.5.1</b> Visual privacy setbacks to side and rear boundaries are provided in accordance with Table 3.5: Abutting R50 or less (1st to 4th Floor) Bed / Study / Open walkways = 4.5m Abutting R50 or less (1st to 4th Floor) other Habitable rooms = 6.0m Abutting R50 or less (1st to 4th Floor) Balconies / Private Open Space = 7.5m	All major openings abutting neighbouring properties screened to eliminate any direct overlooking.	Yes

<b>A3.5.2</b> Balconies are unscreened for at least 25% of their perimeter (including edges abutting a building).	All balconies are unscreened as they all face the public realm (i.e. Whitfords Avenue or Belrose Park).		Yes								
<b>A3.5.3</b> Living rooms have an external outlook from at least one major opening that is not obscured by a screen.	<table><tr><td>Unit 1 - 2 x major openings</td><td>Unit 5 - 1 x major opening</td></tr><tr><td>Unit 2 - 1 x major opening</td><td>Unit 6 - 1 x major opening</td></tr><tr><td>Unit 3 - 1 x major opening</td><td>Unit 7 - 1 x major opening</td></tr><tr><td>Unit 4 - 1 x major opening</td><td></td></tr></table>		Unit 1 - 2 x major openings	Unit 5 - 1 x major opening	Unit 2 - 1 x major opening	Unit 6 - 1 x major opening	Unit 3 - 1 x major opening	Unit 7 - 1 x major opening	Unit 4 - 1 x major opening		Yes
Unit 1 - 2 x major openings	Unit 5 - 1 x major opening										
Unit 2 - 1 x major opening	Unit 6 - 1 x major opening										
Unit 3 - 1 x major opening	Unit 7 - 1 x major opening										
Unit 4 - 1 x major opening											
<b>A3.5.4</b> Windows and balconies are sited, oriented, offset or articulated to restrict direct overlooking, without excessive reliance on high sill levels or permanent screening of windows and balconies.	Majority of windows and balconies site, oriented, offset and articulated to restrict direct overlooking. <b>Unit 5 and 6 contains major openings which have direct over-looking onto public foyer area.</b>		Yes <b>No - refer Element Objective assessment below</b>								
<b>Element Objective:</b> <b>O 3.5.1</b> <i>The orientation and design of <b>buildings</b>, windows and <b>balconies</b> minimises direct overlooking of <b>habitable rooms</b> and private outdoor living areas within the <b>site</b> and of neighbouring properties, while maintaining <b>daylight</b> and <b>solar access</b>, ventilation and the external outlook of habitable rooms.</i>											
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.5.1 to DG3.5.5:</b> The proposal has been assessed against and is deemed to satisfy Element Objective 3.5.1 on the following basis: <ul style="list-style-type: none"><li>Unit 5 and 6 major openings have been provided with a landscape planter area in front of the opening with landscaping proposed that will provide natural screening once plants are established.</li></ul>											

Clause 3.6 – Public Domain Interface		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A3.6.1</b> Majority of ground floor dwellings fronting onto a street or public open space have direct access by way of a private terrace, balcony or courtyard.	Unit 1 and 2 have direct access to Belrose Park as well as Whitfords Ave via gate.	Yes
<b>A3.6.2</b> 1. Car-parking not located within primary street setback. 2. Car parking designed to integrate with landscaping & building façade.	No parking in primary street setback. Parking is screened by landscaping and integrated beneath built form above.	Yes Yes
<b>A3.6.3</b> Upper level balconies and/or windows overlook the street and public domain areas.	All balconies and major openings along Whitfords Avenue and Belrose Park provide for passive surveillance.	Yes
<b>A3.6.4</b> Balustrading includes a mix of visually opaque and visually permeable materials.	Mix provided.	Yes

<b>A3.6.5</b> Level between private terraces / front gardens / ground floor level and FGL of street level = avg<1m / max 1.2m.	Levels differences <1m.	Yes
<b>A3.6.6</b> 1. Fencing visually permeable above 1.2m; 2. Avg height of solid walls or fences not exceed 1.2m.	All fencing along the Belrose Park frontage is visually permeable above 1.2m. Average height of solid walls or fences do not exceed 1.2m.	Yes Yes
<b>A3.6.7</b> Fencing, landscaping and other elements on the frontage designed to eliminate opportunities for concealment.	No opportunities for concealment on the site.	Yes
<b>A3.6.8</b> Bins not located within or visible from primary street setback.	Bins provided within designated store.	Yes
<b>A3.6.9</b> Services / utilities in the primary street setback are integrated into the design & not detract from the amenity & visual appearance of the street frontage.  <b>Note:</b> <sup>1</sup> Firefighting and access to services such as power and water meters require careful consideration in the design of the front façade. Consult early with relevant authorities to resolve functional requirements in an integrated design solution.	Gas, water metres and electrical distribution box located 5.5m from street frontage along battleaxe leg common boundary.  <b>*Note: design requirement under DFES / Aust Standards AS2149.1 Fire Hydrant Installations</b>	Yes
<b>Element Objectives:</b> <b>O 3.6.1</b> The transition between the private and <b>public domain</b> enhances the privacy and safety of residents. <b>O 3.6.2</b> Street facing <b>development</b> and <b>landscape</b> design retains and enhances the <b>amenity</b> and safety of the adjoining <b>public domain</b> , including the provision of shade.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.6.1 to DG3.6.10:</b> Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of public domain interface.		

<b>Clause 3.7 – Pedestrian Access &amp; Entries</b>		
<b>Acceptable Outcome</b>	<b>Proposed</b>	<b>Complies (Yes / No)</b>
<b>A3.7.1</b> Pedestrian entries are connected via a legible, well-defined, continuous path of travel between lift lobbies, stairs, accessways, dwelling entries etc.	Primary entry connected via defined path to pedestrian access gate on Belrose Park frontage. secondary entry provided via Whitfords Road frontage into car parking area. Signage may be required for visitors coming off Northwood Way down battleaxe leg in order to improve legibility.	Yes
<b>A3.7.2</b> Pedestrian entries are protected from the weather	Pedestrian entries are protected from the weather by the first floor built form.	Yes

<b>A3.7.3</b> Pedestrian entries are: <ul style="list-style-type: none"> <li>• well-lit for safety and amenity.</li> <li>• Visible from the public domain.</li> <li>• Provide passive surveillance of entry from within the site.</li> </ul>	Sensor and ankle high illumination proposed. Primary entry partially visible from the public realm (Northwood Way). Some improved legibility recommended (i.e. signage). Entry / approach is provided passive surveillance from Units 1 and 3.	Yes Yes Yes
<b>A3.7.4</b> Is the pedestrian access a shared zone? <ul style="list-style-type: none"> <li>o Yes - Pedestrian path to be delineated and measures incorporated to prioritise the pedestrian and constrain vehicle speed.</li> </ul>	Partially. Pedestrian primary intended to traverse via separate path off Belrose Park. Vehicle speeds expected to be low due to restricted sight movement due to lot shape.	Yes
<b>A3.7.5</b> Services / utilities located at the pedestrian entry are integrated into the design	The bike and bin stores are in close proximity to the pedestrian entry but are designed into the building.	Yes
<b>A3.7.6</b> Bins are not located at the primary pedestrian entry.	The proposed bin store has adequate separation from the pedestrian entry.	Yes
<b>Element Objectives:</b> <b>O 3.7.1</b> Entries and pathways are <b>universally accessible</b> , easy to identify and safe for residents and visitors. <b>O 3.7.2</b> Entries to the <b>development</b> connect to and address the <b>public domain</b> with an attractive <b>street</b> presence.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.7.1 to DG3.7.8:</b> Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of pedestrian access and entries.		

<b>Clause 3.8 – Vehicle Access</b>		
<b>Acceptable Outcome</b>	<b>Proposed</b>	<b>Complies (Yes / No)</b>
<b>A3.8.1</b> One opening per 20m street frontage	Only one opening to the development is proposed.	Yes
<b>A3.8.2</b> Vehicle entries identifiable from street, integrated with overall façade design <b>and/ or</b> located behind primary building line.	Vehicle entry from Northwood Way street is easily identifiable through the separate crossover.	Yes
<b>A3.8.3</b> Vehicle entries have adequate separation from intersections.	Achieved as no intersection in the vicinity.	Yes
<b>A3.8.4</b> Vehicle circulation areas avoid headlights shining / nuisance to development and adjoining properties.	Headlight glare not an issue to adjoining properties. Some glare may occur into Unit 1 bed 1 however can be minimised through appropriate landscape planting and/or alteration of window.	Yes
<b>A3.8.5</b> Driveway width kept to a functional minimum, relative to the traffic volumes and entry / egress requirements	Driveway limited to battleaxe leg size. Passing lane provided as well as sufficient parking aisle width to allow for vehicle access / egress from car bays.	Yes

<b>A3.8.6</b> Does the driveway/s driveway length >15m? Apply (1)  (1) Two way access required. (2) Two way access <b>not</b> required.	5.5m wide passing area provided.	Yes
<b>A3.8.7</b> Walls, fences and other structures truncated or reduced to no higher than 0.75m within 1.5m of where they adjoin vehicle access points, public street or where two streets intersect (refer Figure 3.8a)	No walls, fences or other structures within 1.5m of any adjoining access points.	Yes
<b>Element Objectives:</b> <b>O 3.8.1</b> Vehicle access points are designed and located to provide safe access and egress for vehicles and to avoid conflict with pedestrians, cyclists and other vehicles. <b>O 3.8.2</b> Vehicle access points are designed and located to reduce visual impact on the <b>streetscape</b> .		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG3.8.1 to DG3.8.5:</b> Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of vehicle access.		

Clause 3.9 – Car & Bicycle Parking					
Acceptable Outcome	Proposed				Complies (Yes / No)
<b>A3.9.1</b> Bicycle parking is provided as per Table 3.9. Accessible via continuous path of travel from entry point.	No of units	Location A	Location B		Yes
		Bays Required		Provided	
	No of Units	Location A	Location B		
<b>A3.9.2</b>	Resident <b>car</b> bays (1 bed)	1.0	0.8	n/a	
Parking is provided for cars / motorcycles as per Table 3.9.	Resident <b>car</b> bays (2+ bed)	6.0	6.0	n/a	10.0
<b>A3.9.3</b>	Visitor <b>car</b> bays (up to 12 units); or	7.0		0.8	2.0
Maximum parking provision = double the min. Required as per Table 3.9.	Visitor <b>car</b> bays (>13 units)	n/a		n/a	-
	Resident <b>bicycle</b> bays			3.5	4.0
	Visitor <b>bicycle</b> bays			0.7	1.0
	<b>Motorbike/scooter</b> bays (where more than 20 dwellings) - <b>Location A</b>	7.0		n/a	-
	<b>Motorbike/scooter</b> bays (where more than 20 dwellings) - <b>Location B</b>			n/a	-
	<b>Note:</b> <sup>1</sup> Calculations of parking ratios shall be rounded up to the next whole number.				

	<sup>2</sup> For each five motorcycle/scooter parking bays provided in accordance with Table 3.9, car parking bays may be reduced by one bay.	
<b>A3.9.4</b> Car parking and vehicle circulation areas are designed in accordance with AS2890.1 (as amended).	All car parking and vehicle manoeuvring spaces in accordance with Australian Standards.	Yes
<b>A3.9.5</b> Car parking areas not within street setback & not visually prominent from street.	Visitor parking is not located within the primary street setback.	Yes
<b>A3.9.6</b> Car parking is designed, landscaped or screened to mitigate visual impacts when viewed from dwellings and private outdoor spaces.	All resident and visitor bays are screened from view by either landscaping or the first floor.	Yes
<b>A3.9.7</b> Visitor parking is clearly visible from the driveway, sign-marked & accessible from primary entry.	Visitor parking is clearly visible from the driveway and accessible.	Yes
<b>A3.9.8</b> Parking shade structures (if applicable) integrate with building design & avoid any reflectivity.	The first floor is used as the shade structure.	Yes
<b>A3.9.9</b> Are there any uncovered parking bays? No - A3.9.9 not applicable  <b>No of uncovered bays</b> 0 <b>No. Of trees required</b> 0	n/a	n/a
<b>A3.9.10</b> Basement parking <1m above ground. Where it protrudes above ground, is designed or screened to minimise visual impact.	No basement parking and the ground floor parking is appropriately screened from view.	n/a
<b>Element Objectives:</b> <b>O 3.9.1</b> Parking and facilities are provided for cyclists and other modes of transport. <b>O 3.9.2</b> Carparking provision is appropriate to the location, with reduced provision possible in areas that are highly walkable and/or have good public transport or cycle networks and/or are close to employment centres. <b>O 3.9.3</b> Car parking is designed to be safe and <b>accessible</b> . <b>O 3.9.4</b> The design and location of car parking minimises negative visual and environmental impacts on <b>amenity</b> and the <b>streetscape</b> .		

Justification against **Element Objectives** having regard to **Planning Guidance DG3.9.1 to DG3.9.13**:


Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of car and bicycle parking.

# 4

## Designing the building

Part 4 informs the design and assessment of **apartment** projects to ensure apartments deliver high **amenity** for residents. It includes **building** form, layout, functionality, **landscape** design, environmental performance and residential amenity. It is to be used by all parties designing, submitting or assessing **development** proposals.

### Clause 4.1 – Solar & Daylight Access

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.1.1</b> a) Min. 70% of dwellings having living rooms and private open space that obtain at least 2 hours direct sunlight between 9am and 3pm on 21 June <b>AND</b> b) Max. 15% of dwellings receiving no direct sunlight between 9am and 3pm on 21 June.	<p>Unit 1, 3 and 4 (43%) achieve direct sunlight into living rooms and private open space between 9am and 3pm. All other units do not (57%).</p> <p><i>Note: sun angles based off data available at <a href="http://www.suncalc.org">www.suncalc.org</a></i></p>  <p>(Source: <a href="https://www.suncalc.org/#/-31.796,115.7441,19/2020.06.21/09:00/1/1">https://www.suncalc.org/#/-31.796,115.7441,19/2020.06.21/09:00/1/1</a>)</p>	<p>A4.1.1(a) - No - refer Element Objective assessment below</p> <p>A4.1.1(b) - No - refer Element Objective assessment below</p>

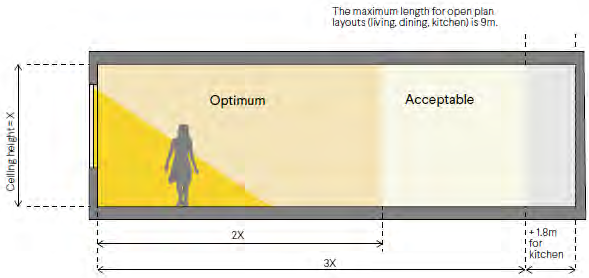
<b>A4.1.2</b> Every habitable room has at least one window in an external wall, visible from all parts of the room, with a glazed area not less than 10% of the floor area and comprising a minimum of 50% of clear glazing.	All habitable rooms have windows provided with clear glazing not less than 10% of the floor area.	Yes
<b>A4.1.3</b> Lightwells and/or skylights do not form the primary source of daylight to any habitable room	Lightwells primary source of daylight for units 5, 6 and 7.	No - refer Element Objective assessment below
<b>A4.1.4</b> The building is oriented and incorporates external shading devices in order to: (1) minimise direct sunlight to habitable rooms: between late September and early March in climate zones 4, 5 and 6 <u>only</u> AND (2) permit winter sun to habitable rooms in accordance with A 4.1.1(a).	Direct summer sun avoided due to shading created by buildings above or units being south-facing.  No external shading devices impact access to winter sun to habitable rooms.	A4.1.4(1) - Yes  A4.1.4(2) - Yes
<b>Element Objectives:</b> <b>O 4.1.1</b> In <i>climate zones 4, 5 and 6</i> : the <b>development</b> is sited and designed to optimise the number of <b>dwelling</b> s receiving winter <b>sunlight</b> to <b>private open space</b> and via windows to <b>habitable rooms</b> . <b>O 4.1.2</b> Windows are designed and positioned to optimise <b>daylight</b> access for <b>habitable rooms</b> . <b>O 4.1.3</b> The <b>development</b> incorporates shading and glare control to minimise heat gain and glare: – from mid-spring to autumn in <b>climate zones 4, 5 and 6</b>		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.1.1 to DG4.1.6</b> : The proposal has been assessed against and is deemed to <b>NOT</b> satisfy Element Objective 4.1.1 and 4.1.2 on the following basis: <ul style="list-style-type: none"> <li>Majority of units do not achieve adequate north-facing light to living rooms and/or primary outdoor living areas (i.e. balconies).</li> <li>Balconies and living rooms for units 5, 6 and 7 are south facing with no direct sunlight achieved.</li> <li>North facing major opening windows on units 5, 6 and 7 are constrained for sunlight access due to landscape treatment that is needed in order to minimise privacy issues resulting from having major openings opening up directly onto circulation and common spaces (refer cl. 4.5).</li> </ul>		

Clause 4.2 – Natural Ventilation		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.2.1</b> Habitable rooms have openings on at least two walls with a straight line distance between the centre of the openings of at least 2.1m	All habitable rooms achieve the 2.1m distance between openings and in a straight line.	A4.1.1(a) - Yes

<b>A4.2.2</b> a) Min. 60% of dwellings naturally cross-ventilated in the first nine storeys of the building. b) Single aspect apartments included within the 60% min. Of (a) above must have: <ul style="list-style-type: none"> <li>o ventilation openings oriented between 45° – 90° of the prevailing cooling wind direction <b>AND</b></li> <li>o Room depth &lt;3 x ceiling height.</li> </ul> c) For dwellings located at the 10th storey or above, balconies incorporate high and low level ventilation openings.	<table> <tr> <th>Total No. Of dwellings in first 9-storeys</th><th>No. Of dwellings cross-ventilated</th><th>No. Of single aspect units compliant with (b)</th></tr> <tr> <td>7</td><td>7</td><td>n/a</td></tr> <tr> <td><b>% breakdown</b></td><td>100.0%</td><td>n/a</td></tr> </table>	Total No. Of dwellings in first 9-storeys	No. Of dwellings cross-ventilated	No. Of single aspect units compliant with (b)	7	7	n/a	<b>% breakdown</b>	100.0%	n/a	A4.2.2(a) - Yes  A4.2.2(b) - Yes  A4.2.3(c) - Yes
Total No. Of dwellings in first 9-storeys	No. Of dwellings cross-ventilated	No. Of single aspect units compliant with (b)									
7	7	n/a									
<b>% breakdown</b>	100.0%	n/a									
<b>A4.2.3</b> The depth of cross-over and cross-through apartments with openings at either end and no openings on side walls does not exceed 20m.	All units <20m in depth.	Yes									
<b>A4.2.4</b> No habitable room relies on lightwells as the primary source of fresh-air.	All dwellings have access to other ventilation that aren't light wells.	A4.2.4(1) - Yes									
<b>Element Objectives:</b> <b>O 4.2.1</b> <i>Development</i> maximises the number of <b>apartments</b> with <b>natural ventilation</b> . <b>O 4.2.2</b> <i>Individual dwellings</i> are designed to optimise <b>natural ventilation</b> of <b>habitable rooms</b> . <b>O 4.2.3</b> <i>Single aspect apartments</i> are designed to maximise and benefit from <b>natural ventilation</b> .											
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.2.1 to DG4.2.8</b> : Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of natural ventilation.											

Clause 4.3 – Size & Layout of dwellings		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.3.1</b> Dwellings have a minimum internal floor area in accordance with Table 4.3a: <ul style="list-style-type: none"> <li>o Studio 37sqm</li> <li>o 1 bed 47sqm</li> <li>o 2 bed 1 bath 67sqm</li> <li>o 3 bed 1 bath 90sqm</li> </ul>	47sqm for 1-bed, 1-bath 67sqm for 2-bed, 1-bath 72sqm for 2-bed, 2-bath (75sqm for Unit 02)	A4.1.1(a) - Yes A4.1.1(a) - Yes A4.1.1(a) - Yes

<p><b>Note:</b></p> <p><sup>1</sup> An additional 3m2 shall be provided for designs that include a second or separate toilet, and 5m2 for designs that include a second bathroom.</p>																																																																																														
<p><b>A4.3.2</b></p> <p>Habitable rooms have minimum floor areas and dimensions in accordance with Table 4.3b:</p> <ul style="list-style-type: none"><li>Master Bed 10sqm @ 3m x 3m min.</li><li>Other Bed 9sqm @ 3m x 3m min.</li></ul> <p><u>Studio / 1 bed</u></p> <ul style="list-style-type: none"><li>Living – n/a @ 3.6m x 3.6m min.</li></ul> <p><u>Other dwelling types</u></p> <ul style="list-style-type: none"><li>Living n/a @ 4m x 4m min.</li></ul>	<table><thead><tr><th>Unit No or Type</th><th>Room type</th><th>Min floor area (sqm)</th><th>Min dimension (m)</th><th>Compliance</th></tr></thead><tbody><tr><td rowspan="2">1</td><td>Master Bed</td><td>13.2</td><td>3.61 x 3.66</td><td>Yes</td></tr><tr><td>Living</td><td>25.1</td><td>3.82 x 6.58</td><td>Yes</td></tr><tr><td rowspan="3">2</td><td>Master bed</td><td>13.5</td><td>3.5 x 3.86</td><td>Yes</td></tr><tr><td>Bed 2</td><td>9.9</td><td>3.05 x 3.26</td><td>Yes</td></tr><tr><td>Living</td><td>28.7</td><td>6.62 x 4.34</td><td>Yes</td></tr><tr><td rowspan="3">3</td><td>Master bed</td><td>15.7</td><td>3.82 x 4.13</td><td>Yes</td></tr><tr><td>Bed 2</td><td>12.8</td><td>4.29 x 2.98</td><td>Yes</td></tr><tr><td>Living</td><td>14.4</td><td>3.41 x 4.21</td><td>No</td></tr><tr><td rowspan="3">4</td><td>Master bed</td><td>15.7</td><td>4.43 x 3.54</td><td>Yes</td></tr><tr><td>Bed 2</td><td>9.0</td><td>3.0 x 3.0</td><td>Yes</td></tr><tr><td>Living</td><td>17.1</td><td>3.65 x 4.69</td><td>No</td></tr><tr><td rowspan="3">5</td><td>Master bed</td><td>12.1</td><td>3.46 x 3.5</td><td>Yes</td></tr><tr><td>Bed 2</td><td>10.5</td><td>3.46 x 3.04</td><td>Yes</td></tr><tr><td>Living</td><td>22.9</td><td>4.0 x 5.72</td><td>Yes</td></tr><tr><td rowspan="3">6</td><td>Master bed</td><td>12.1</td><td>3.46 x 3.5</td><td>Yes</td></tr><tr><td>Bed 2</td><td>10.5</td><td>3.46 x 3.04</td><td>Yes</td></tr><tr><td>Living</td><td>21.7</td><td>4.0 x 5.42</td><td>Yes</td></tr><tr><td rowspan="3">7</td><td>Master bed</td><td>11.7</td><td>3.3 x 3.54</td><td>Yes</td></tr><tr><td>Bed 2</td><td>9.5</td><td>2.7 x 3.53</td><td>No</td></tr><tr><td>Living</td><td>21.7</td><td>4.0 x 5.42</td><td>Yes</td></tr></tbody></table>	Unit No or Type	Room type	Min floor area (sqm)	Min dimension (m)	Compliance	1	Master Bed	13.2	3.61 x 3.66	Yes	Living	25.1	3.82 x 6.58	Yes	2	Master bed	13.5	3.5 x 3.86	Yes	Bed 2	9.9	3.05 x 3.26	Yes	Living	28.7	6.62 x 4.34	Yes	3	Master bed	15.7	3.82 x 4.13	Yes	Bed 2	12.8	4.29 x 2.98	Yes	Living	14.4	3.41 x 4.21	No	4	Master bed	15.7	4.43 x 3.54	Yes	Bed 2	9.0	3.0 x 3.0	Yes	Living	17.1	3.65 x 4.69	No	5	Master bed	12.1	3.46 x 3.5	Yes	Bed 2	10.5	3.46 x 3.04	Yes	Living	22.9	4.0 x 5.72	Yes	6	Master bed	12.1	3.46 x 3.5	Yes	Bed 2	10.5	3.46 x 3.04	Yes	Living	21.7	4.0 x 5.42	Yes	7	Master bed	11.7	3.3 x 3.54	Yes	Bed 2	9.5	2.7 x 3.53	No	Living	21.7	4.0 x 5.42	Yes	A4.2.2(a) - No - refer Element Objective assessment below
Unit No or Type	Room type	Min floor area (sqm)	Min dimension (m)	Compliance																																																																																										
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4	Master bed	15.7	4.43 x 3.54	Yes																																																																																										
	Bed 2	9.0	3.0 x 3.0	Yes																																																																																										
	Living	17.1	3.65 x 4.69	No																																																																																										
5	Master bed	12.1	3.46 x 3.5	Yes																																																																																										
	Bed 2	10.5	3.46 x 3.04	Yes																																																																																										
	Living	22.9	4.0 x 5.72	Yes																																																																																										
6	Master bed	12.1	3.46 x 3.5	Yes																																																																																										
	Bed 2	10.5	3.46 x 3.04	Yes																																																																																										
	Living	21.7	4.0 x 5.42	Yes																																																																																										
7	Master bed	11.7	3.3 x 3.54	Yes																																																																																										
	Bed 2	9.5	2.7 x 3.53	No																																																																																										
	Living	21.7	4.0 x 5.42	Yes																																																																																										
<p><b>A4.3.3</b></p> <p>Min. ceiling heights are:</p> <ul style="list-style-type: none"><li>Habitable rooms – 2.7m</li><li>Non-habitable rooms – 2.4m</li><li>All other ceilings as per NCC / BCA.</li></ul>	Ceiling height is greater than 2.7m.	Yes																																																																																												
<p><b>A4.3.4</b></p> <p>a) The length of a single aspect open plan living area is equal to or less than 3 x the ceiling height.</p> <p>b) An additional 1.8m length may be provided for a kitchen, where the kitchen is the furthest point subject to max.Depth &lt;9m.</p>	No single aspect dwellings.	n/a																																																																																												

		
<p><b>Element Objectives:</b></p> <p><b>O 4.3.1</b> The internal size and layout of <b>dwelling</b>s is functional with the ability to flexibly accommodate furniture settings and personal goods, appropriate to the expected household size.</p> <p><b>O 4.3.2</b> Ceiling heights and room dimensions provide for well-proportioned spaces that facilitate good <b>natural ventilation</b> and <b>daylight</b> access.</p>		
<p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.3.1 to DG4.3.4:</b></p> <p>The proposal has been assessed against and is deemed to satisfy Element Objective 4.3.1 and 4.3.2 on the following basis:</p> <ul style="list-style-type: none"> <li>Whilst there are minor dimension variations to habitable rooms as identified in the table above, overall areas are above and beyond the minimum requirement and room shapes are considered to be functional and provide a reasonable level of amenity for future occupants.</li> </ul>		

Clause 4.4 – Private Open Space & Balconies		
Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A4.4.1</b></p> <p>Each dwelling has private open space accessed directly from a habitable room as per Table 4.4:</p> <ul style="list-style-type: none"> <li>Studio / 1 Bed 8sqm @ 2m</li> <li>2 Bed 10sqm @ 2.4m</li> <li>3 bed 12sqm @ 2.4m</li> <li>Ground unit with terrace 15sqm @ 3m</li> </ul>	<p>All dwellings have access to a balcony or courtyard that is at least 10sqm in area and has minimum dimensions of 2.4m.</p>	<p>Yes</p>
<p><b>A4.4.2</b></p> <p>Where private open space requires screening for visual privacy compliance, the entire open space is not screened and any screening is designed such that it does not obscure the outlook from adjacent living rooms.</p>	<p>All units have unscreened balconies.</p>	<p>Yes</p>
<p><b>A4.4.3</b></p> <p>Private open space design is integrated with or complements overall building design.</p>	<p>All balconies and courtyards have been integrated into the design of the building.</p>	<p>Yes</p>

<b>A4.4.4</b> Services and fixtures located within private open space, (e.g. air-conditioner units, clothes drying etc), not visible from the street / integrated into building design.	Hot water systems located on the balconies for units 3-7.	No - refer Element Objective assessment below
<b>Element Objectives:</b> <b>O 4.4.1</b> Dwellings have good access to appropriately sized <b>private open space</b> that enhances residential <b>amenity</b> . <b>O 4.4.2</b> <b>Private open space</b> is sited, oriented and designed to enhance liveability for residents. <b>O 4.4.3</b> <b>Private open space</b> and <b>balconies</b> are integrated into the overall architectural form and detail of the <b>building</b> .		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.4.1 to DG4.4.8</b> : The proposal has been assessed against and is deemed to satisfy Element Objective 4.4.1, 4.4.2 and 4.4.3 on the following basis: <ul style="list-style-type: none"> <li>Hot water systems are located on balconies however the unit sizes are not considered to impact functionality of the balcony areas, particularly due to the fact that overall areas are above and beyond the minimum requirement.</li> </ul>		

Clause 4.5 – Circulation & Common Spaces		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.5.1</b> Circulation corridors are a min. 1.5m in width	All access ways are greater than 1.5m.	Yes
<b>A4.5.2</b> Circulation & common spaces designed for universal access.	Common space / communal open space is located at-grade. First floor area is only accessible via stairs however lift is not required.	Yes
<b>A4.5.3</b> Circulation & common spaces capable of passive surveillance / good sightlines	Passive surveillance should be achieved with people coming and going, sufficient light should be achieved as first floor foyer is open.	Yes
<b>A4.5.4</b> Circulation & common spaces can be illuminated at night without creating light spill to adjacent dwellings.		Yes
<b>A4.5.5</b> a) Bedroom windows & major openings to living rooms do not open directly onto circulation or common spaces. b) Designed to ensure visual privacy & manage noise intrusion.	All bedroom and major openings do not open directly onto common spaces with the following exceptions: <ul style="list-style-type: none"> <li>unit 1 bed 1</li> <li>unit 5 kitchen and bed 2</li> <li>unit 6 kitchen and bed 2</li> </ul>	A4.5.5(a) - No - refer Element Objective assessment below  A4.5.5(b) - Yes

**Element Objectives:**

**O 4.5.1** Circulation spaces have adequate size and capacity to provide safe and convenient access for all residents and visitors.

**O 4.5.2** Circulation and common spaces are attractive, have good **amenity** and support opportunities for social interaction between residents.

Justification against **Element Objectives** having regard to **Planning Guidance DG4.5.1 to DG4.5.7:**

The proposal has been assessed against and is deemed to satisfy Element Objective 4.5.1 and 4.5.2 on the following basis:

- Subject to appropriate landscape treatment, adequate visual privacy and separation can be achieved between habitable rooms and common spaces.

**Clause 4.6 – Storage**

Acceptable Outcome	Proposed						Complies (Yes / No)
<b>A4.6.1</b> Each dwelling has exclusive use of a separate, ventilated, weatherproof, bulky goods storage area as per Table 4.6: <ul style="list-style-type: none"><li>Studio 3sqm 1.5m (w) x 2.1m (h)</li><li>1 bed 3sqm 1.5m (w) x 2.1m (h)</li><li>2 bed 4sqm 1.5m (w) x 2.1m (h)</li><li>3 bed 5sqm 1.5m (w) x 2.1m (h)</li></ul>	Unit	Required (area)	Store sqm	Dimension	Compliance	Yes	
	1	3sqm	4.01	2.4 x 1.6	Yes		
	2	4sqm	4.01	2.4 x 1.6	Yes		
	3	4sqm	4.0	2.5 x 1.5	Yes		
	4	4sqm	4.0	2.5 x 1.5	Yes		
	5	4sqm	4.01	1.9 x 2.1	Yes		
	6	4sqm	4.0	2.2 x 1.7	Yes		
	7	4sqm	4.0	2.2 x 1.7	Yes		
<b>A4.6.2</b> Bulky good stores located in areas that are convenient, safe, well-lit, secure and subject to passive surveillance.	Independent store facility provided at ground level which is convenient, safe, well-lit and secure with adequate passive surveillance.					Yes	
<b>A4.6.3</b> Storage provided separately from dwellings or within or adjacent to private open space, integrated into building design / open space and not readily visible from public..	All storage is separate from dwellings and integrated into the design and not easily visible from public.					Yes	

**Element Objectives:**

**O 4.6.1** Well-designed, functional and conveniently located **storage** is provided for each **dwelling**.

Justification against **Element Objectives** having regard to **Planning Guidance DG4.6.1 to DG4.6.7:**

Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of storage.

### Clause 4.7 – Managing the Impact of Noise

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.7.1</b> Dwellings exceed the min. requirements of NCC (i.e. <i>AAAC Guideline for Apartment and Townhouse Acoustic Rating</i> (or equivalent)).	Acoustic report demonstrates compliance. Report has also been reviewed by the City's health services.	Yes
<b>A4.7.2</b> Potential noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open space and refuse bins not located adjacent to the external wall of habitable rooms or within 3m of a window to a bedroom.	Noise from the driveway and circulation areas achieve compliance with the Environmental Noise Regulations - refer Acoustic report.  Noise from the servicing of waste receptacles is acceptable subject to collection occurring off-site on the verge.	Yes
<b>A4.7.3</b> Major openings to habitable rooms are oriented away or shielded from external noise sources	Major openings orientated away from the limited noise sources.	Yes
<b>Element Objectives:</b> <b>O 4.7.1</b> The siting and layout of <b>development</b> minimises the impact of external noise sources and provides appropriate <b>acoustic privacy</b> to <b>dwellings</b> and on-site <b>open space</b> . <b>O 4.7.2</b> Acoustic treatments are used to reduce sound transfer within and between <b>dwellings</b> and to reduce noise transmission from external noise sources.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.7.1 to DG4.7.3</b> : Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of managing the impact of noise.		

### Clause 4.8 – Dwelling Mix

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.8.1</b> a) Dwelling mix as per local housing strategy or relevant local planning instrument <b>OR</b>  b) Is the proposal for over 10 dwellings? No. A4.8.1 not applicable.	1 x single bedroom dwelling and 6 x two bed dwellings have been provided.	n/a
<b>A4.8.2</b> Different dwelling types are well distributed throughout the development, including a mix of dwelling types on each floor.		Yes

**Element Objectives:**

**O 4.8.1** A range of *dwelling* types, sizes and configurations is provided that caters for diverse household types and changing community demographics.

Justification against **Element Objectives** having regard to **Planning Guidance DG4.8.1 to DG4.8.3:**

Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of dwelling mix.

### Clause 4.9 – Universal Design

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.9.1</b> a) 20% of all dwellings, across a range of dwelling sizes, meet Silver Level requirements as defined in the <i>Liveable Housing Design Guidelines</i> (Liveable Housing Australia) <b>OR</b> b) 5% of dwellings are designed to Platinum Level as defined in the <i>Liveable Housing Design Guidelines</i> (Liveable Housing Australia).	Units 1 and 2 (28%) achieve silver levels requirements	Yes

**Element Objectives:**

**O 4.9.1** *Development* includes *dwellings* with *universal design* features providing dwelling options for people living with disabilities or limited mobility and/or to facilitate ageing in place.

Justification against **Element Objectives** having regard to **Planning Guidance DG4.9.1 to DG4.9.3:**

Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of universal design.

### Clause 4.10 – Facade Design

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.10.1</b> Façade design includes: <ul style="list-style-type: none"> <li>scaling, articulation, materiality and detailing at lower levels that reflect scale, character &amp; function of public realm.</li> <li>rhythm/ visual interest achieved through building articulation, composition of different elements, changes in texture,</li> </ul>	Building design includes a mixture of building materials that will create different finishes that propose visual interest in the development. The scale and character also compliments development in the locality.	Yes



material and colour.		
<b>A4.10.2</b> Is the proposal greater than 4-storeys? No. A4.10.2 not applicable.	n/a	n/a
<b>A4.10.3</b> Façade includes design elements that complement adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights.	Development is only two storeys which is consistent with surrounding development, the design is generally not dissimilar to other large single houses.	Yes
<b>A4.10.4</b> Building services fixtures integrated in the design (not visually intrusive from the public realm).	Building services are well integrated into the design.	Yes
<b>A4.10.5</b> Development with a primary setback of 1m or less to the street includes awnings that: <ul style="list-style-type: none"> <li>o define and provide weather protection to entries</li> <li>o integrated into the façade design</li> <li>o consistent with the streetscape character.</li> </ul>	Setback greater than 1m.	Yes
<b>A4.10.6</b> Does the proposal contain any signage? No. A4.10.6 not applicable.	n/a	n/a
<b>Element Objectives:</b> <b>O 4.10.1</b> <i>Buildingfaçades</i> incorporate proportions, materials and design elements that respect and reference the character of the local area. <b>O 4.10.2</b> <i>Buildingfaçades</i> express internal functions and provide visual interest when viewed from the public realm.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.10.1 to DG4.10.5:</b> Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of facade design.		

<b>Clause 4.11 – Roof Design</b>		
<b>Acceptable Outcome</b>	<b>Proposed</b>	<b>Complies (Yes / No)</b>
<b>A4.11.1</b> Roof form / top of building complements the façade design and desired streetscape character	Roof is consistent in colour and design to the rest of the development and is relatively flat in nature which reduces the impact of bulk on the streetscape and surrounding residents.	Yes
<b>A4.11.2</b> Building services located on roof not visually obtrusive when viewed	Any services on the roof will not be visible from the street.	Yes

from street.		
<b>A4.11.3</b> Useable roof space is safe for users and minimises overlooking and noise impacts on private open space and habitable rooms within the development and on adjoining sites.	No useable roof space proposed.	n/a
<b>Element Objectives:</b> <b>O 4.11.1</b> Roof forms are well integrated into the <b>building</b> design and respond positively to the <b>street</b> . <b>O 4.11.2</b> Where possible, roof spaces are utilised to add <b>open space, amenity, solar energy generation</b> or other benefits to the <b>development</b> .		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.11.1 to DG4.11.4:</b> Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of roof design.		

Clause 4.12 – Landscape Design																																							
Acceptable Outcome		Proposed	Complies (Yes / No)																																				
<b>A4.12.1</b> Submission of a landscape plan prepared by a competent landscape designer which includes species list and irrigation plan.		Landscape plan prepared by Naturesque.	Yes																																				
<b>A4.12.2</b> Landscaped areas located & designed to support mature, shade-providing trees to open space and the public realm and improve amenity of development.		Range of landscape areas provided throughout the site however, tree deep soil areas (DSA) are insufficient being 53.8sqm (5.29%) in lieu of 101.7sqm (10%). Site able to support max 3 x small trees in lieu of: <ul style="list-style-type: none"> <li>1 x large tree and 1 x medium tree; or</li> <li>1 x large tree and small trees to suit.</li> </ul> as required under cl. 3.3.	No - refer Element Objective assessment below																																				
<b>A4.12.3</b> Planting on building structures meets the requirements of Table 4.12: <table border="1" data-bbox="73 1082 660 1358"> <thead> <tr> <th colspan="4">Requirement</th></tr> <tr> <th>Plant Type</th><th>Soil Volume</th><th>Soil Depth</th><th>Soil Area</th></tr> </thead> <tbody> <tr> <td>Large tree</td><td>76.8m<sup>3</sup></td><td>1.2m</td><td>64m<sup>2</sup> @ 7m</td></tr> <tr> <td>Medium Tree</td><td>36 m<sup>3</sup></td><td>1.0m</td><td>36m<sup>2</sup>@ 5m</td></tr> <tr> <td>Small tree</td><td>7.2 m<sup>3</sup></td><td>0.8m</td><td>3m x 3m</td></tr> <tr> <td>Ornamentals</td><td>3.2 m<sup>3</sup></td><td>0.8m</td><td>2m x 2m</td></tr> <tr> <td>Shrubs</td><td>n/a</td><td>0.5-0.6m</td><td>n/a</td></tr> <tr> <td>Ground Cover</td><td>n/a</td><td>0.3-0.45m</td><td>n/a</td></tr> <tr> <td>Turf</td><td>n/a</td><td>0.2m</td><td>n/a</td></tr> </tbody> </table>		Requirement				Plant Type	Soil Volume	Soil Depth	Soil Area	Large tree	76.8m <sup>3</sup>	1.2m	64m <sup>2</sup> @ 7m	Medium Tree	36 m <sup>3</sup>	1.0m	36m <sup>2</sup> @ 5m	Small tree	7.2 m <sup>3</sup>	0.8m	3m x 3m	Ornamentals	3.2 m <sup>3</sup>	0.8m	2m x 2m	Shrubs	n/a	0.5-0.6m	n/a	Ground Cover	n/a	0.3-0.45m	n/a	Turf	n/a	0.2m	n/a	Planter beds on first floor approx. 600mm depth. For shrubs and ground cover.	Yes
Requirement																																							
Plant Type	Soil Volume	Soil Depth	Soil Area																																				
Large tree	76.8m <sup>3</sup>	1.2m	64m <sup>2</sup> @ 7m																																				
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<b>Definition:</b>																																							



## DYNAMIC PLANNING AND DEVELOPMENTS

<ul style="list-style-type: none"> <li>○ Large tree – 12m high crown spread.</li> <li>○ Medium tree – 8.12m high crown spread.</li> <li>○ Small tree – 4.8m high crown spread.</li> <li>○ Ornamentals – 3.4m high crown spread.</li> <li>○ Shrubs – n/a</li> <li>○ Ground cover – n/a</li> <li>○ Turf – n/a</li> </ul>		
<b>A4.12.4</b> Building services fixtures are integrated in the design of the landscaping and are not visually intrusive	Building services not visually obtrusive	Yes
<b>Element Objectives:</b> <b>O 4.12.1 Landscape</b> design enhances <b>streetscape</b> and pedestrian <b>amenity</b> ; improves the visual appeal and comfort of <b>open space</b> areas; and provides an attractive outlook for <b>habitable rooms</b> . <b>O 4.12.2</b> Plant selection is appropriate to the orientation, exposure and <b>site</b> conditions and is suitable for the adjoining uses. <b>O 4.12.3 Landscape</b> design includes water efficient irrigation systems and where appropriate incorporates water harvesting or water re-use technologies. <b>O.4.12.4 Landscape</b> design is integrated with the design intent of the architecture including its built form, materiality, key functional areas and <b>sustainability</b> strategies.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.12.1 to DG4.12.7</b> : The proposal has been assessed against and is deemed to <b>NOT</b> satisfy Element Objective 4.12.2 on the following basis: <ul style="list-style-type: none"> <li>• Generally the proposal has provided sufficient details regarding the landscaping. Concern is however expressed in relation to the feasibility of the proposed trees and the ability of the development to achieve appropriate canopy cover given the limited availability of deep soil areas and canopy coverage area - refer reasoning provided under cl. 2.4 and cl. 3.3 above.</li> <li>• Adverse amenity impact to adjoining properties by virtue of insufficient DSA and required canopy coverage.</li> </ul>		

Clause 4.13 – Adaptive Reuse		
Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.13.1</b> Is the proposal additions to a heritage building? No. A4.13.1 not applicable.	n/a	n/a
<b>A4.13.2</b> Is the proposal additions to an existing building? No. A4.13.2 not applicable.	n/a	n/a
<b>Element Objectives:</b> <b>O 4.13.1</b> New additions to existing <b>buildings</b> are contemporary and complementary and do not detract from the character and scale of the existing building. <b>O 4.13.2</b> Residential <b>dwelling</b> s within an adapted <b>building</b> provide good <b>amenity</b> for residents, generally in accordance with the requirements of this policy.		

Justification against **Element Objectives** having regard to **Planning Guidance DG4.13.1 to DG4.13.4:**

Not applicable.

#### Clause 4.14 – Mixed use

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.14.1</b> Is proposal within a mixed-use area under local planning framework? No. A4.14.1 not applicable.	n/a	n/a
<b>A4.14.2</b> Ground floor uses including COS, habitable rooms, dwelling verandahs / courtyards address, enhance & activate the street.	n/a	n/a
<b>A4.14.3</b> Is there non-residential space proposed? No. A4.14.3 not applicable.	n/a	n/a
<b>A4.14.4</b> Is there non-residential space proposed? No. A4.14.4 not applicable.	n/a	n/a
<b>A4.14.5</b> Is there non-residential space proposed? No. A4.14.5 not applicable.	n/a	n/a

#### Element Objectives:

**O 4.14.1** *Mixed use development enhances the streetscape and activates the street.*

**O 4.14.2** *A safe and secure living environment for residents is maintained through the design and management of the impacts of non-residential uses such as noise, light, odour, traffic and waste.*

Justification against **Element Objectives** having regard to **Planning Guidance DG4.14.1 to DG4.14.4:**

Not applicable.

### Clause 4.15 – Energy Efficiency

Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A4.15.1</b></p> <p>a) Incorporate at least one significant energy efficiency initiative within the development that exceeds minimum practice (refer Design Guidance) <b>OR</b></p> <p>b) All dwellings exceed the minimum NatHERS requirement for apartments by 0.5 stars.</p> <p><b>Note:</b>  <sup>1</sup> Compliance with the NCC requires that development shall achieve an average star-rating across all dwellings that meets or exceeds a nominated benchmark, and that each unit meets or exceeds a slightly lower benchmark. Compliance with this Acceptable Outcome requires that each unit exceeds that lower benchmark by at least half a star</p>	<p>The following (building) energy efficiency measures are incorporated in the design:</p> <ul style="list-style-type: none"> <li>• The design proposes the use of light sensors and LED lights in all public areas to reduce electricity consumption across the site when areas are not in use.</li> <li>• All apartments will be fitted with a quality insulation treatment.</li> <li>• Potential for roof mounted photo-voltaic system is also proposed to be installed which will reduce the reliance on grid electricity.</li> <li>• Double glazed windows are proposed to certain key windows to reduce heat absorption / loss.</li> <li>• The design has extensively considered natural ventilation and solar access through and across the site to reduce the need for mechanical heating and cooling means year-round. The design has been further refined in response to DRP comments.</li> <li>• Bedrooms and living areas are positioned near the façade of the apartments to allow for improved access to daylight, natural ventilation, and opportunity for outlook to the street — improving their liveability, usability, and reducing the need for mechanical heating and cooling.</li> <li>• Materials with low ongoing maintenance requirements, and low embodied energy will be used throughout.</li> <li>• All individual apartments will be sub-metered.</li> </ul>	<p>Yes</p>
<p><b>Element Objectives:</b>  <b>O 4.15.1</b> Reduce energy consumption and greenhouse gas emissions from the <i>development</i>.</p> <p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.15.1 to DG4.15.3:</b>            Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of energy efficiency.</p>		

### Clause 4.16 – Water Management & Conservation

Acceptable Outcome	Proposed	Complies (Yes / No)
<p><b>A4.16.1</b></p> <p>Dwellings are individually metered for water usage.</p>	<p>Individual meters proposed.</p>	<p>Yes</p>
<p><b>A4.16.2</b></p> <p>Stormwater runoff generated from small rainfall events is managed on-site.</p>	<p>Yes. To be condition of approval.</p>	<p>Yes</p>

<b>A4.16.3</b> Provision of an overland flow path for safe conveyance of runoff from major rainfall events to the local stormwater drainage system.	To be confirmed at building permit stage.	Yes
<b>Element Objectives:</b> <b>O 4.16.1</b> Minimise <b>potable water</b> consumption throughout the <b>development</b> . <b>O 4.16.2</b> Stormwater runoff from <b>small rainfall events</b> is managed on-site, wherever practical. <b>O 4.16.3</b> Reduce the risk of flooding so that the likely impacts of <b>major rainfall events</b> will be minimal.		
Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.16.1 to DG4.16.6</b> . Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of water management and conservation.		

<b>Clause 4.17 – Waste Management</b>		
<b>Acceptable Outcome</b>	<b>Proposed</b>	<b>Complies (Yes / No)</b>
<b>A4.17.1</b> Waste storage provided in accordance WALGA <i>Multiple Dwelling Waste Management Plan Guidelines</i> and/or local government requirements.	5 x 240L general waste, 2 x recycling and 1 x green waste.	No - refer Element Objective assessment below
<b>A4.17.2</b> Waste Management Plan provided in accordance with WALGA <i>Multiple Dwelling Waste Management Plan Guidelines</i> - Appendix 4A and/or equivalent local government requirements.	WMP provided	Yes
<b>A4.17.3</b> Sufficient area provided to accommodate bins for separate storage of green waste, recycling and general waste.	Separate receptacles for different waste streams provided.	Yes
<b>A4.17.4</b> Waste storage is sited and designed to be screened from view from the street, open space & private dwellings	Waste is screened from view.	Yes
<b>Element Objectives:</b> <b>O 4.17.1</b> Waste <b>storage</b> facilities minimise negative impacts on the <b>streetscape, building</b> entries and the <b>amenity</b> of residents. <b>O 4.17.2</b> Waste to landfill is minimised by providing safe and convenient bins and information for the separation and recycling of waste.		

Justification against **Element Objectives** having regard to **Planning Guidance DG4.17.1 to DG4.17.6**.

Proposal would satisfy all of the Acceptable Outcome criteria and responds appropriately by way of waste management subject to the following modification:

- Require 4 x 240L general waste, 3 x recycling (2 x 240L + 1 x 360L) and 1 x green waste.

#### Clause 4.18 – Utilities

Acceptable Outcome	Proposed	Complies (Yes / No)
<b>A4.18.1</b> Utilities located within the front setback, adjacent to building entry or visible parts of roof are integrated into the building design, landscape and/or fencing so they are accessible but not visually obtrusive.	Utilities all appropriately screened from view or well integrated into building design.	Yes
<b>A4.18.2</b> Developments are fibre-to-premises ready, including provision for installation of fibre throughout the site and to every dwelling.	Dependant on NBN roll out for locality. Outside of applications control.	Yes
<b>A4.18.3</b> Hot water units, A/C units, clotheslines are located such that they can be safely maintained, not visually obtrusive from street and do not impact on functionality of OLA or internal storage.	Drying via dryer internal to dwellings, AC on the roof and in ground floor landscaping and hot water systems on balconies and ground floor landscaping. Due to location, all will not be visually obtrusive from the street.	Yes
<b>A4.18.4</b> Laundries are designed and located to be convenient to use, secure, weather-protected and well-vented; and are of an overall size and dimension that is appropriate to the size of the dwelling	Laundry is adequate and provided within bathrooms.	Yes
<p><b>O 4.18.1</b> The <b>site</b> is serviced with power, water, gas (where available), wastewater, fire services and telecommunications/broadband services that are fit for purpose and meet current performance and access requirements of service providers.</p> <p><b>O 4.18.2</b> All <b>utilities</b> are located such that they are accessible for maintenance and do not restrict safe movement of vehicles or pedestrians.</p> <p><b>O 4.18.3</b> <b>Utilities</b>, such as distribution boxes, power and water meters are integrated into design of <b>buildings</b> and <b>landscape</b> so that they are not visually obtrusive from the <b>street</b> or <b>open space</b> within the <b>development</b>.</p> <p><b>O 4.18.4</b> <b>Utilities</b> within individual <b>dwellings</b> are of a functional size and layout and located to minimise noise or air quality impacts on <b>habitable rooms</b> and <b>balconies</b>.</p>		
<p>Justification against <b>Element Objectives</b> having regard to <b>Planning Guidance DG4.18.1 to DG4.18.9</b>.</p> <p>Not required in this instance. Proposal satisfies all of the Acceptable Outcome criteria and responds appropriately by way of utilities.</p>		

SUBMISSIONS AGAINST THE PROPOSAL			
Design element	Issue raised	Consultant Comment	Applicant Comment
<b>2.2 Building height</b>	<ul style="list-style-type: none"> <li>The scale and bulk of the development is inconsistent with its setting.</li> </ul>	Not upheld. The proposed building height of the development satisfies the acceptable outcome criteria of SPP7.3 and is of a building height consistent with other residential developments in the immediate locality.	The proposed height is below that permissible within State Planning Policy 7.3 Volume 2 (SPP 7.3 V2). Therefore, the context of the area has been established by virtue of the zoning.
<b>2.3 Street setbacks</b>		No specific comments received.	
<b>2.4 Side and rear setbacks</b>	<ul style="list-style-type: none"> <li>Proposed setback discretions will impact future residents. If the proposal was of a suitable size for the site, it would not need to encroach into the prescribed setbacks.</li> <li>Setbacks are inconsistent with the existing streetscape pattern or the desired streetscape character.</li> </ul>	Upheld. The proposal seeks a number of lot boundary setback variations, specifically to the north, west and south boundaries. The setback variations result in adverse building bulk to adjoining neighbours, the impacts compounded by the fact that variations are also sought to the required deep soil area / landscaping requirement of cl. 3.3 of SPP7.3 Vol 2.	<p>The proposed setbacks are consistent with the element objectives and mostly the acceptable outcomes of SPP 7.3 Volume 2.</p> <p>The setbacks provided provide ample separation to the adjoining properties, it also allows for a presence to Whitfords Avenue and Belrose Park which is consistent with the City's Local Planning Framework.</p> <p>The development is relatively concealed from Northwood Way. As such, it does not impact or interrupt the streetscape.</p>
<b>2.5 Plot ratio</b>	<ul style="list-style-type: none"> <li>The driveway should not be included in the plot ratio calculation as it is unbuildable area and unusable. If this is removed from the calculation, the site is overdeveloped.</li> </ul>	Partially upheld. The plot ratio in isolation satisfies the acceptable outcome criteria of SPP7.3 Vol 2. The area of driveway or battleaxe leg is also included as part of the plot ratio calculation. However, it is agreed that the driveway which is approximately 113sqm in area does constrain the site as its purpose is fundamentally limited to vehicular access and egress. In comparison, a non-battleaxe lot would have less area limited to vehicular access and egress and therefore, contributing towards building setbacks and/or useable landscaping / DSA area.	<p>SPP 7.3 permits the inclusion of the access leg, if this principle applied, then all other matters would be well exceeded for example landscaping.</p> <p>The setting of this development is unique as it is accessed off an access leg but provides interactions with Whitfords Avenue and Belrose Park, whilst maintaining appropriate setbacks and visual privacy to the residential dwellings. It is appropriately sized and meets the acceptable outcomes.</p>
<b>2.6 Building depth</b>		No specific comments received.	
<b>2.7 Building separation</b>	<ul style="list-style-type: none"> <li>The development does not provide for sufficient separation to provide for residential amenity.</li> </ul>	<p>Upheld. The proposal is not considered to satisfy element objective 2.7.4 on the basis that reduced / variations to the northern setback contribute towards adverse building bulk to the adjoining neighbours. It also contributes towards insufficient deep soil area (cl.3.3) landscaping which would provide additional separation / screening of the building bulk.</p> <p>In the location of deep soil areas, building setbacks are deemed to be insufficient, creating likely conflict between growth of mature medium or large trees / canopy and the building structure.</p>	The development provides separation to each of the residential dwellings, each are consistent in terms of visual privacy and the consultant and designer reports illustrates that the development achieves acceptable sunlight, ventilation, and acoustic separation.
<b>3.2 Orientation</b>	<ul style="list-style-type: none"> <li>Development to Whitfords avenue does not provide high amenity or outlook for future residents.</li> </ul>	Partially upheld. The treatment of the Whitfords Avenue facade is considered to be acceptable in this instance. However, the proposal is not considered to satisfy the element objective of cl. 3.2 in that the building layout and orientation does not optimise solar and daylight access for units, in particular those on the first floor.	The City's Local Planning Framework encourages interaction with Whitfords Avenue. It does afford high amenity as the road reserve will always remain unencumbered allowing for a complete aspect over the commercial centre. In addition to this, the development affords passive surveillance over Whitfords Avenue.
<b>3.3 Tree canopy and deep soil areas</b>	<ul style="list-style-type: none"> <li>Not much open space</li> <li>Inadequate deep soil zones to sustain the required amount of landscaping or likely canopy.</li> <li>Development does not include any large trees to offset proposed large building.</li> <li>Deep soil zones are undersized meaning that the trees will be unsustainable. Less green space will lead to the heat island effect.</li> </ul>	<p>Upheld. The proposal does not retain any trees and much of the proposed Tree DSA areas do not meet the minimum requirements to support a medium or large tree as required under this clause. Supporting information outlining whether reduced DSA is suitable for tree species selected has also not been provided.</p> <p>There is also potential conflict of tree canopies with building structures and roofs.</p>	As detailed within the landscaping plan and the planning report, the proposed development meets the element objectives in relation to 3.3. Whilst it is acknowledged that one large tree is not provided in accordance with the Acceptable Outcomes, two medium and two small trees are proposed along with over 20% deep soil area. This is appropriate given the sites context abutting a public open space reserve. It is also a better outcome than the predevelopment state of the site.

<b>3.4 Communal open space</b>	No specific comments received.		
<b>3.5 Visual privacy</b>	<ul style="list-style-type: none"> <li>Loss of privacy for adjoining property.</li> <li>The upper floor foyer faces north, directly overlooking adjoining property's patio and indoor area.</li> <li>Privacy screen provided to foyer is inadequate.</li> </ul>	Not upheld. There are no privacy implications to adjoining neighbours.	The design is proposed to afford optimum visual surveillance over Whitfords Avenue and Public Open Space, whilst reducing the overall visual privacy impacts on the adjoining properties. This has been achieved by providing a foyer area to the north of the site, which is screened and appropriate setback from the adjoining residential properties. The acceptable outcomes have also been achieved.
<b>3.6 Public domain interface</b>	No specific comments received.		
<b>3.7 Pedestrian access and entries</b>	<ul style="list-style-type: none"> <li>Many school students currently cross the driveway of No. 12. The increase in vehicles will cause increased safety issues.</li> </ul>	Not upheld. The proposal is considered to satisfy all of the Acceptable Outcome criteria and Element Objectives by way of pedestrian access and entries. A support traffic impact statement has also been submitted in support of the proposal raising no adverse traffic impacts.	Not relevant.
<b>3.8 Vehicle access</b>	<ul style="list-style-type: none"> <li>Bedrooms are adjacent to the driveway and will be subjected to increased noise and fumes.</li> <li>The site is not accessible via Belrose Avenue or Whitfords Avenue as suggested on the plans.</li> </ul>	Not upheld. No adverse impacts have been identified by way of vehicular noise or fumes. The proposal does provide pedestrian access to the subject site from Whitfords Avenue as well as Belrose Park by way of an access gate.	<p>There is separation provided between the ground floor multiple dwellings and the driveway. They will not be impacted by noise or fumes.</p> <p>The site is directly accessible to both Whitfords Avenue and Belrose Park through pedestrian gates.</p>
<b>3.9 Car and bicycle parking</b>	<ul style="list-style-type: none"> <li>Parking arrangements are inadequate and will constitute a nuisance given the battleaxe access to the site.</li> <li>Visitor and resident parking are insufficient.</li> <li>There could be up to 26 vehicles to the site and insufficient parking. Where does someone park a trailer/boat.</li> <li>Tandem bays will result in car shuffling and therefore won't be used.</li> </ul>	Not upheld. Proposed car and bicycle parking has been provided in accordance the minimum numbers required under SPP7.3 Vol 2.	A traffic impact statement has been provided, whereby a traffic engineer has detailed the car parking and access is sufficient.
<b>4.1 Solar and daylight access</b>	<ul style="list-style-type: none"> <li>Inner apartments only have northern and southern aspects therefore resulting in artificial lighting being used all day long.</li> <li>There is no solar access to the living spaces and balconies of units 5, 6 and 7.</li> </ul>	Upheld. The proposal does not achieve the minimum 70% required for units obtaining direct sun to living and outdoor living areas for at least 2 hours between 9am and 3pm at 21 June.	All balconies and living areas are subject to natural sunlight, as visible on the development plans.
<b>4.2 Natural ventilation</b>	<ul style="list-style-type: none"> <li>Noise from Whitfords Avenue will make impossible to open south facing windows, therefore resulting in no cross ventilation.</li> </ul>	Not upheld. All units achieve adequate cross-ventilation. Noise impacts from Whitfords Avenue have been assessed to be within levels acceptable under the Noise Regulations.	This is hypothetical and the development will be appropriately designed to reduce off site acoustic impacts as detailed within the acoustic report.
<b>4.3 Size and layout of dwellings</b>	<ul style="list-style-type: none"> <li>Apartments are small and pokey</li> </ul>	Not upheld. Whilst minor variations are sought to a number of room dimensions relative to units 3, 4 and 7, overall room areas are above and beyond the minimum requirement and as such, are considered to represent functional spaces with an acceptable level of amenity for future occupants.	The apartments are greater than the acceptable outcomes afforded within SPP 7.3 V2 and meet the element objectives.
<b>4.4 Private open space and balconies</b>	No specific comments received.		
<b>4.5 Circulation and common spaces</b>	No specific comments received.		
<b>4.6 Storage</b>	<ul style="list-style-type: none"> <li>Storerooms are small and will result in car bays being used as storage, and vehicles parking on the street.</li> </ul>	Not upheld. Storage areas satisfy acceptable outcome criteria of SPP7.3 Vol 2. Any unauthorised parking of vehicles on the street will be a matter for City rangers to police.	This is hypothetical.
<b>4.7 Managing the impact of noise</b>	<ul style="list-style-type: none"> <li>Increased noise from driveway as increased vehicles.</li> </ul>	Not upheld. The proposal has been assessed to be within acceptable noise levels of the Noise Regulations.	This has been addressed as part of the additional information provided. Habitable rooms of the adjoining dwelling are setback a minimum 10.5 metres from the driveway and is further concealed by a masonry wall height of over 2.1m from the natural ground level of the driveway.

			Resulting in appropriate acoustic buffer for the marginal increase in traffic – this is also detailed in the acoustic report whereby there are no specific acoustic requirements.
<b>4.8 Dwelling mix</b>	No specific comments received.		
<b>4.9 Universal design</b>	No specific comments received.		
<b>4.10 Façade design</b>	<ul style="list-style-type: none"> <li>Proposal displays harsh, boxy lines which contrast sharply with more natural existing tones. It downgrades the amenity of the area.</li> </ul>	Not Upheld. The overall architecture of the proposal and its use of materials and colours are considered to be sympathetic to existing development in the locality.	Disagree.
<b>4.11 Roof design</b>	No specific comments received.		
<b>4.12 Landscape design</b>	No specific comments received.		
<b>4.13 Adaptive reuse</b>	No specific comments received.		
<b>4.14 Mixed use</b>	No specific comments received.		
<b>4.15 Energy efficiency</b>	No specific comments received.		
<b>4.16 Water management and conservation</b>	No specific comments received.		
<b>4.17 Waste management</b>	<ul style="list-style-type: none"> <li>Total number of bins insufficient for number of dwellings.</li> <li>Where are the bins going to be located during bin day?</li> <li>Waste in this area is already problematic, which will be made worse by the proposal.</li> <li>The subject site has no street frontage.</li> <li>Bins on the verge will be an eyesore.</li> <li>Safety issue having bins on the verge for pedestrians and vehicles.</li> <li>Bin collection is during the late afternoon; therefore, bins cannot be collected in the morning as stated in submission.</li> </ul>	Not upheld. The proposal number and type of waste receptacles satisfy the City's policy requirements, subject to a minor amendment that reduces the number of general waste bins and increases the number of recycle bins by one (1).	This is addressed within the Waste Management Plan.
<b>4.18 Utilities</b>	No specific comments received.		
<b>Other</b>			
<b>Planning and Development (Local Planning Schemes) Regulations 2015 – Clause 67</b>			
<b>67(b)</b>	<ul style="list-style-type: none"> <li>the Council has stated that it does not want this type of development in this area with the new interim Local Planning Policy Scheme Amendment.</li> <li>Draft has been approved and should be given due consideration.</li> <li>The approval of the Draft LPP shows the intended character of the area. This proposal is not consistent with this.</li> </ul>	Noted. The Draft LPP was adopted at the Special Council Meeting held on 24 March 2020 (JSC02-03/20). It is considered that whilst this LPP has been adopted by Council, it is not considered 'certain and imminent' as it requires approval by the State Government (WAPC and the Minister), and certain modifications / changes may be made or the amendments not approved. For this reason, the draft policy has not been given 'due regard'.	The policy/amendment is not considered to be imminent, as such it cannot be afforded any regard.
<b>67(m)</b>	<ul style="list-style-type: none"> <li>This proposed development is not in keeping with other residences in the area and will stick out "like a sore thumb". It is an ugly building and does not fit in with the area. It will overlook the residences surrounding it, limiting their privacy and sunlight.</li> </ul>	<p>The proposal satisfies the provisions of SPP7.3 Vol 2 by way of privacy and overshadowing.</p> <p>By way of appearance, there are no specific design guidelines for the locality which require the proposal to be designed in a particular manner. It is noted that a previous iteration of the proposal which remains largely the same by way of design and materiality was the subject of</p>	The development will be relatively concealed from Northwood Way.

	<ul style="list-style-type: none"> <li>Inconsistent with future development as Draft LPP has been adopted.</li> </ul>	consideration by the City's Design Reference Panel at its meeting held on 19 June 2019. At this meeting, the design was deemed to be acceptable.	
<b>67(n)</b>	<ul style="list-style-type: none"> <li>Will be detrimental to amenity of adjacent properties by way of noise, safety, visual impacts and waste management.</li> <li>Proposal is at odds with development in the area and will be a blight on the landscape.</li> </ul>	<p>Concerns relating to noise, safety and waste management are not upheld.</p> <p>Visual impact concerns are upheld on the grounds of setback and DSA variations which are being sought.</p>	Detailed previously.
<b>67(r)</b>	<ul style="list-style-type: none"> <li>Development is not suitable for the land given the width of the access leg.</li> <li>Bins along the verge will interfere with sight lines, posing a safety risk to vehicles and pedestrians.</li> </ul>	<p>Not upheld. The width of the access does not 'in principle' preclude the site from being developed for multiple dwellings.</p> <p>Not upheld. Bins are proposed to be placed within the verge area of Belrose Park and do not pose any sight light limitations.</p>	Detailed previously.
<b>67(s)</b>	<ul style="list-style-type: none"> <li>Battleaxe layout poses access issues to the site.</li> <li>Can the City guarantee the safety of school children and pedestrians?</li> </ul>	<p>Not upheld. Vehicles are able to access and egress the site in forward gear. Passing points and convex mirrors are also provided on-site to avoid any traffic issues.</p> <p>Not upheld. A transport impact statement prepared by a qualified traffic engineer has concluded that there will be no safety risk to pedestrians for the area.</p>	The battle-axe has complete visibility by virtue of being located up to a public open space and an open driveway on the east. The situation is no different to all driveways within the area.
<b>67(t)</b>	<ul style="list-style-type: none"> <li>Parking will be inadequate, resulting in parking on the verge.</li> <li>Traffic is in excess of the road system.</li> </ul>	<p>Not upheld. The proposal provides sufficient parking for future occupants and visitors.</p> <p>Not upheld. A transport impact statement prepared by a qualified traffic engineer has concluded that the added traffic volume created by the proposal will not compromise the operation of the existing road network.</p>	Detailed previously.
<b>67 (u)</b>	<ul style="list-style-type: none"> <li>Placement of bins on park is unacceptable.</li> <li>Negative visual impact and could cause safety issues for vehicles and pedestrians.</li> </ul>	Not upheld. Placement of the bins within the verge of Belrose Park immediately west of the subject site has been deemed the best location by way of accessibility as well as limiting any detrimental noise impacts to adjoining residences.	Detailed previously.
<b>67 (x)</b>	<ul style="list-style-type: none"> <li>Negative impact on community as a whole.</li> <li>Clash of building styles and visual impact</li> </ul>	Not upheld. As noted above, the proposal has been the subject of consideration by the City's Design Reference Panel.	Detailed previously.
<b>Traffic</b>	<ul style="list-style-type: none"> <li>The is only one feeder road into Northwood Way, and any increase in traffic will have a negative impact on the surrounding neighbourhood.</li> <li>Considerable increase in traffic generation considering that there is only one road in and out.</li> <li>Increased traffic to area will devalue property.</li> </ul>	<p>Not upheld. A transport impact statement prepared by a qualified traffic engineer has concluded that the added traffic volume created by the proposal will not compromise the operation of the existing road network.</p> <p>Not upheld. Property values is not a relevant planning consideration.</p>	Detailed previously.
<b>Character of streetscape and surrounding area</b>	<ul style="list-style-type: none"> <li>The design of the dwelling is out of proportion with the surrounding dwellings.</li> <li>Proposal does not enhance the character of the streetscape.</li> <li>Proposal will result in loss of tree canopy.</li> </ul>	<p>Not upheld. As noted above, the proposal has been the subject of consideration by the City's Design Reference Panel.</p> <p>Upheld. Concerns relating to loss of tree canopy are agreed. The proposal presents a shortfall in Tree DSA which is of a concern.</p>	Detailed previously.
<b>Overall development</b>	<ul style="list-style-type: none"> <li>The architect has not been responsive to the environment and character of the area.</li> <li>Inappropriate proposal on a 728sqm lot.</li> <li>Green space is not sufficient to contribute to the successful integration of the dwellings to the streetscape of the neighbourhood.</li> </ul>	<p>Partially upheld. Shortfall in Tree DSA area is acknowledged. Not upheld. The subject lot is 1,017sqm in size.</p> <p>Upheld. It is agreed that the subject site presents a shortfall in green space, specifically in relation to Tree DSA / canopy coverage area.</p>	Detailed previously.
<b>Local Planning Policies</b>	<ul style="list-style-type: none"> <li>Council have adopted the Draft Development in Housing Opportunity Areas Policy. This policy should be given due regard in the assessment of this application.</li> <li>This development would not be permissible under the new Draft policy.</li> </ul>	Not upheld - refer response above regarding draft LPP.	Detailed previously.

	<ul style="list-style-type: none"> <li>Visitor parking is not provided as per the RDLPP.</li> </ul>		
<b>Social impacts</b>	<ul style="list-style-type: none"> <li>Will affect the enjoyment of the adjoining recreational area and the suburb in general.</li> <li>Safety concerns regarding increased traffic along driveway and adjoining schools, parks increasing the number of children walking past the site.</li> <li>Chose the area because of the quiet lifestyle in a respectable area, the proposal will destroy this.</li> <li>Apartments may/will become rental properties attracting unsavoury characters, resulting in an increase in noise, and antisocial behaviour.</li> <li>Size of dwellings will attract people who live there on a temporary basis and will attract the wrong type of people and downgrade the area.</li> </ul>	<p>Not upheld. The proposal is not considered to have any detrimental impact on existing residents in terms of their enjoyment of nearby recreational areas and the suburb in general.</p> <p>Not upheld. Traffic concerns are not anticipated for reasons outlined above.</p> <p>Not upheld. Suggestions that the units may become rentals and any purported anti-social issues are not relevant planning considerations.</p> <p>Not upheld. Size of dwellings have been assessed to satisfy cl.4.3 - size &amp; layout of dwellings of SPP7.3 Vol 2.</p>	Detailed previously.
<b>General</b>	<ul style="list-style-type: none"> <li>The use is discretionary for multiple dwellings; therefore, this should be considered carefully.</li> <li>Development would be better if it included the amalgamation of lots, however development on the subject site with one driveway does not work.</li> <li>Conflict of interest between the City administration and the consultant for the owners</li> <li>Would be happy to see two dwellings however seven is too much.</li> <li>No study has been undertaken with regard to the use of the park on the weekends and increased traffic to No. 12 if application approved.</li> <li>The proposal does not respect or reference the character of the local area.</li> <li>Approval of this development will make it more difficult to refuse similar applications in the future.</li> <li>Approval of the development will devalue properties in the area.</li> </ul>	<p>Noted. The proposal has been assessed on its merits.</p> <p>Not upheld. Issues of conflict of interest are not substantiated.</p> <p>Not upheld. The frequency of use of Belrose Park is not a relevant planning consideration.</p> <p>Not upheld. The design of the proposal is not subject to any local character design requirement.</p> <p>Not upheld. Future applications for multiple dwellings will each be assessed on their merit.</p> <p>Not upheld. Property values are not a relevant planning consideration.</p>	Detailed previously.