HERRING STORER ACOUSTICS

WALLACE PM

COLES FLORIDA BEACH DEVELOPMENT
FLORIDA BEACH

ENVIRONMENTAL ACOUSTIC ASSESSMENT

JANUARY 2021

OUR REFERENCE: 27160-2-20205-02

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ENVIRONMENTAL ACOUSTIC ASSESSMENT

FLORIDA BEACH SHOPPING CENTRE DEVELOPMENT

Job No: 20205-02

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FOR

WALLACE PM

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APPENDICES

1. INTRODUCTION

Herring Storer Acoustics were commissioned by Coles Group Property Developments Ltd, through Wallace PM, to undertake an acoustic assessment of noise emissions associated with the proposed shopping centre development located in Dawesville.

The objective of this study was to assess noise emissions from delivery vehicles and mechanical services at the noise sensitive premises surrounding the proposed site for compliance with the requi3rements of the *Environmental Protection (Noise) Regulations 1997*.

The assessment was undertaken to inform the design development team of the store and accompany the development application.

The site plan is attached in Appendix A.

2. SUMMARY

Refrigerated truck deliveries have been calculated to comply at all times.

Smaller truck deliveries, such as bakery deliveries, have been calculated to comply at all times.

Noise levels associated with the typical mechanical plant assumed for the purposes of this preliminary assessment have been calculated to comply at all times.

Additionally, noise emissions from outdoor play associated with the child care would comply with the Assigned Noise Levels during the day period, with the inclusion of the fencing as shown on the drawings attached in Appendix A.

Finally, noise associated with the gym have also been calculated to comply with the Assigned Noise Levels at all times.

It is noted that the mechanical plant assumed in our assessment is indicative only, hence, the calculated noise levels are an indication that control of noise emissions associated with mechanical plant and location on the roof of the proposed store, will be critical during the design phase of the development. Based on previous projects of this nature, the selection/location of exhaust fans that are utilised during the early hours of the morning (i.e. bakery and chicken cooker exhaust fans) will be critical in ensuring compliance with the Regulations is achieved.

3. CRITERIA

3.1 ENVIRONMENTAL PROTECTION (NOISE) REGULATIONS 1997

The *Environmental Protection (Noise) Regulations 1997* stipulate the allowable noise levels at any noise sensitive premises from other premises. The allowable noise level is determined by the calculation of an influencing factor, which is added to the baseline criteria set out in Table 1 of the Regulations. The baseline assigned noise levels are listed in Table 3.1.

TABLE 3.1 – ASSIGNED NOISE LEVELS

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises within 15 metres of a dwelling (Highly Sensitive Areas)	0700 - 1900 hours Monday to Saturday	45 + IF	55 + IF	65 + IF
	0900 - 1900 hours Sunday and Public Holidays	40 + IF	50 + IF	65 + IF
	1900 - 2200 hours all days	40 + IF	50 + IF	55 + IF
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays	35 + IF	45 + IF	55 + IF
Commercial Premises	All Hours	60	75	80

Note: The L_{A10} noise level is the noise that is exceeded for 10% of the time.
The L_{A1} noise level is the noise that is exceeded for 1% of the time.
The L_{Amax} noise level is the maximum noise level recorded.

It is a requirement that noise from the site be free of annoying characteristics (tonality, modulation and impulsiveness) at other premises, defined below as per Regulation 9.

"impulsiveness" means a variation in the emission of a noise where the difference between L_{Apeak} and $L_{Amax\ Slow}$ is more than 15dB when determined for a single representative event;

"modulation" means a variation in the emission of noise that –

(a) is more than 3dB $L_{A\ Fast}$ or is more than 3dB $L_{A\ Fast}$ in any one-third octave band;
(b) is present for more at least 10% of the representative assessment period; and
(c) is regular, cyclic and audible;

"tonality" means the presence in the noise emission of tonal characteristics where the difference between –

(a) the A-weighted sound pressure level in any one-third octave band; and
(b) the arithmetic average of the A-weighted sound pressure levels in the 2 adjacent one-third octave bands,

is greater than 3 dB when the sound pressure levels are determined as $L_{Aeq,T}$ levels where the time period T is greater than 10% of the representative assessment period, or greater than 8 dB at any time when the sound pressure levels are determined as $L_{A\ Slow}$ levels.

Where the above characteristics are present and cannot be practicably removed, the following adjustments are made to the measured or predicted level at other premises.

TABLE 3.2 – ADJUSTMENTS FOR ANNOYING CHARACTERISTICS

Where tonality is present	Where modulation is present	Where impulsiveness is present
+ 5 dB	+ 5 dB	+ 10 dB

Where the noise emission is music, if the music is audible, then any measured level is adjusted according to Table 4.3 below.

TABLE 3.3 – ADJUSTMENTS TO MEASURED MUSIC NOISE LEVELS

Where **impulsiveness** is not present	Where **impulsiveness** is present
+10 dB(A)	+15 dB(A)

The following locations have been determined to require an assessment of noise level emissions.

FIGURE 3.1 – RECEIVER POINTS

The influencing factor at the identified noise sensitive premises has been estimated as follows :

Noise Sensitive Premises - R1 (Residences east of the Dawesville Bypass)

Secondary Road within the inner circle;
Old Coast Road + 2 dB

Commercial Premises within the outer circle;
20 % + 1 dB

Noise Sensitive Premises – R2 (Residences west of Dandaragan Drive, south of Bailey Boulevard) **and R3** (Residences west of Dandaragan Drive, north of Bailey Boulevard).

Commercial Premises within the inner circle;
40 % + 2 dB

Commercial Premises within the outer circle;
20 % + 1 dB

Hence, the influencing factor is estimated at 3 dB for the identified noise sensitive premises, noting that the residential premises R1 to # represent the noise that would be received at the group of residences in the area indicated.

Based on the above influencing factor, the assigned outdoor noise levels are listed in Table 3.4.

TABLE 3.4 - ASSIGNED OUTDOOR NOISE LEVEL FOR R1 AND R7

Premises Receiving Noise	Time of Day	Assigned Level (dB)		
		$L_{A\ 10}$	$L_{A\ 1}$	$L_{A\ max}$
Noise sensitive premises	0700 - 1900 hours Monday to Saturday (Day)	48	58	68
	0900 - 1900 hours Sunday and Public Holidays (Sundays)	43	53	68
	1900 - 2200 hours all days (Evening)	43	53	58
	2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays (Night)	38	48	58

Note: L_{A10} is the noise level exceeded for 10% of the time.
L_{A1} is the noise level exceeded for 1% of the time.
L_{Amax} is the maximum noise level.

4. PROPOSED DELIVERIES

The use of the delivery dock is understood to accommodate 19m articulated delivery trucks, which have been assumed to be refrigerated trucks (i.e worst case scenario). In addition to the larger deliveries, smaller delivery vehicles (i.e. for bakery goods) have been assumed to be a 13m rigid truck.

5. MECHANICAL PLANT

Mechanical plant details have been based on information provided for previous developments of similar size and provided information are located on the roof as shown in the drawings in Appendix A.

Additionally, mechanical plant has been notionally located above each tenancy roof.

6. CHILD CARE CENTRE

From information supplied, we understand that the child care centre normal hours of operations would be between 0630 and 1830 hours, Monday to Friday (closed on public holidays). It is understood that the proposed childcare centre will cater for a maximum of 72 children; with the following breakdown :

Group Room 1	0 – 24 months	12 places
Group Room 2	24 – 36 months	10 places
Group Room 3	24 – 36 months	15 places
Group Room 4	24 – 36 months	15 places
Group Room 5	36+ months	10 places
Group Room 6	36+ months	10 places

It is noted that although the proposed child care centre would open before 7 am (ie during the night period), the outdoor play area would not be used until after 7am.

7. GYM

It is understood that the gym would operate, 24 hours per day / 7 days per week.

With regards to noise breakout from the gym, we note that normally gyms, for safety, use "pinned" weight machines. As such these weights cannot be dropped and the noise of weights dropping is limited to the barbells. Additionally, although they do play background music within gyms, the noise levels within these spaces is limited and the building structure would contain the noise generated. Even so, for information purposes, we have undertaken an assessment of noise breakout from the gym with regards to the Regulatory criteria.

For this this assessment noise emissions from a gym class has been used, as it is typically, marginally higher than the noise within the normal gym area, as gym personnel need to provide instructions. Additionally, an assessment of a 15kg barbell dropping has also been assessed. The sound power levels used in the assessment are listed in Table 7.1.

It is noted that noise from the gym instructor would need to comply with the assigned L_{A10} noise levels. However, noise from the barbell dropping would need to comply with the assigned L_{AMax} noise levels.

TABLE 7.1 – GYM SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Class	80
Barbell	92

To calculate the noise breakout from the gym, the following have been assumed with regards to construction.

- 10.38mm thick laminated glass; and
- Walls with a minimum R_w rating of 50 dB.

The above constructions would be adequate to contain noise generated within the gym. Even so, noise modelling has been undertaken to the neighbouring residences.

8. METHODOLOGY

Noise modelling of the noise propagation from the site was carried out using the environmental noise modelling computer program, "SoundPlan". Single point calculations were undertaken.

Input data for computer modelling included:

- Design of store as per drawings in Appendix A.
- EPA standard weather condition for the day and night periods (see Table 6.1).
- Sound power levels, as summarised in Tables 6.2 to 6.5.

TABLE 6.1 - WEATHER CONDITIONS

Condition	Day Period	Night Period
Temperature	20 °C	15 °C
Relative humidity	50%	50%
Pasquil Stability Class	E	F
Wind speed	4 m/s*	3 m/s*

* From source to receiver

TABLE 6.2 – SOUND POWER LEVELS OF DELIVERY VEHICLES

DESCRIPTION	Sound Power Level (dB(A))
15m articulated delivery truck with refrigeration unit	97
13m rigid delivery truck	85

TABLE 6.3 – SOUND POWER LEVELS OF MECHANICAL PLANT

DESCRIPTION	Sound Power Level (dB(A))
Kitchen Exhaust Fan	83 dB(A)
Exhaust Fans	3 @ 70 dB(A)
Refrigeration Equipment	2 @ 88 dB(A)
Commercial Tenancy Equipment	4 @ 88 dB(A)
Packaged Air Conditioning Unit	75 dB(A)
Child Care Air Conditioning	4 @ 71 dB(A)
Gym Air Conditioning	2 @ 76 dB(A)

TABLE 6.4 – GYM SOUND POWER LEVELS

Item of Equipment	Sound Power Level, (dB(A))
Background Music	80
Barbell	92

TABLE 6.5 – SOUND POWER LEVELS

Item	Sound Power Level, dB(A)
Children Playing	83 (per 10 children)

For the above sound power levels, single point calculations were undertaken for the following scenarios :

Scenario 1 : One large refrigerated truck delivery.

Scenario 2 : One 13m rigid truck delivery (bakery delivery).

Scenario 3 : Mechanical Plant.

Scenario 4 : Child Care outdoor play.

Scenario 5 : Gym background music.

Scenario 6 : Gym equipment (Barbell).

Notes :

1 For the noise to be less than 10% of the time and be assessed under the L_{A1} assigned noise levels, the truck engines and refrigeration units would need to be turned off while unloading is occurring.

2 The L_{A1} assigned noise level would be the pertinent prescribed noise level in this instance (for deliveries) as the duration of time that the noise of the deliveries is present is less than 10% of a representative time period. The noise associated with the delivery is the manoeuvring of the truck into place, upon which the truck is switched off – hence – even if the delivery takes some time (i.e. 30 – 60 minutes) the noise level associated with the truck is not present throughout the duration of the delivery.

3 It is noted that this also means the noise assessment is more "realistic" as if the L_{A10} parameter was to be used as the noise level associated with the truck is not present for more than 10% of a representative time period, the L_{A10} noise level would be at the ambient noise level of the area, rather than the truck noise.

4 Given the number and breakdown of children, acoustic modelling of outdoor play noise was made, based on 70 children playing within the outdoor play areas at the one time, utilising 8 groups of 10 children, sound power levels distributed as plane sources.

5 With regards to the air conditioning, we understand that the air conditioning has not been designed at this stage of the development. However, it is understood that the mechanical service plant for the shopping centre and child care centre would be located on their roofs, with the mechanical service for the gym to be located in a service area location on the southern side of the gym.

6 Boundary fencing to the child care to be as shown on the plans attached in Appendix A.

9. RESULTS

Single point calculations were undertaken for all locations shown in Figure 3.1, with the results of the modelling listed in Table 9.1.

TABLE 9.1 – RESULTANT NOISE LEVEL

Receiver Location	Scenario / Calculated Noise Level, (dB(A))					
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
C1	36	24	39	11	2	14
C2	40	28	36	14	14	26
C3	43	32	30	21	16	28
C4	29	17	38	31	1	13
C5	21	9	39	37	15	27
C6	13	7	37	52	16	28
R1	30	18	31	15	1	13
R2	13	1	29	32	21	33
R3	11	1	33	44	25	37

Given the location and the nature of the noise emissions, noise levels associated with the deliveries – being an L_{A1} – cannot contain tonal characteristics. Whilst unlikely, noise levels associated with mechanical, to be conservative, has had an adjustment of +5 dB(A) to the assessable noise level. It is also noted that noise emissions from children playing does not contain any annoying characteristics and the noise received at the neighbouring from the gym equipment, although unlikely, to be conservative the +10 dB penalty for impulsiveness has been applied. Finally, although again unlikely, the +10dB penalty has been applied to the music within the gym. Therefore, Table 9.2 lists the assessable noise level for each scenario (including the adjustment for tonality for mechanical plant emissions).

TABLE 9.2 – ASSESSABLE NOISE LEVELS

Receiver Location	Scenario / Assessable Noise Level, (dB(A))					
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
C1	36	24	44	11	12	24
C2	40	28	41	14	24	36
C3	43	32	35	21	26	38
C4	29	17	43	31	11	23
C5	21	9	44	37	25	37
C6	13	7	42	52	26	38
R1	30	18	36	15	11	23
R2	13	1	34	32	31	43
R3	11	1	38	44	35	47

Tables 9.3 and 9.4 compares the assessable noise level for large truck deliveries and small truck deliveries against the relevant L_{A1} Assigned Noise Levels for the night period, being the critical time period for compliance.

TABLE 9.3 – ASSESMENT OF NOISE LEVEL – SCENARIO 1 – LARGE TRUCK DELIVERIES

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A1} dB		Exceedance to Assigned Noise Level
	Scenario 1	Time of Day	L_{A1} dB	
C1	36	All Hours	75	Complies
C2	40	All Hours	75	Complies
C3	43	All Hours	75	Complies
C4	29	All Hours	75	Complies
C5	21	All Hours	75	Complies
C6	13	All Hours	75	Complies
R1	30	Night	48	Complies
R2	13	Night	48	Complies
R3	11	Night	48	Complies

TABLE 9.4 – ASSESMENT OF NOISE LEVEL – SCENARIO 2 – SMALL TRUCK DELIVERIES

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A1} dB		Exceedance to Assigned Noise Level
	Scenario 2	Time of Day	L_{A1} dB	
C1	24	All Hours	75	Complies
C2	28	All Hours	75	Complies
C3	32	All Hours	75	Complies
C4	17	All Hours	75	Complies
C5	9	All Hours	75	Complies
C6	7	All Hours	75	Complies
R1	18	Night	48	Complies
R2	1	Night	48	Complies
R3	1	Night	48	Complies

Table 9.5 compares the assessable noise level for mechanical plant against the relevant L_{A10} Assigned Noise Levels for the critical night period.

TABLE 9.5 – ASSESMENT OF NOISE LEVEL – SCENARIO 3 – MECHANICAL PLANT

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
	Scenario 3	Time of Day	L_{A10} dB	
C1	44	All Hours	60	Complies
C2	41	All Hours	60	Complies
C3	35	All Hours	60	Complies
C4	43	All Hours	60	Complies
C5	44	All Hours	60	Complies
C6	42	All Hours	60	Complies
R1	36	Night	38	Complies
R2	34	Night	38	Complies
R3	38	Night	38	Complies

Table 9.6 compares the assessable noise level for outdoor play against the relevant L_{A10} Assigned Noise Levels for the day period.

TABLE 9.6 – ASSESMENT OF NOISE LEVEL – SCENARIO 4 – OUTDOOR PLAY

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
	Scenario 3	Time of Day	L_{A10} dB	
C1	44	All Hours	60	Complies
C2	41	All Hours	60	Complies
C3	35	All Hours	60	Complies
C4	43	All Hours	60	Complies
C5	44	All Hours	60	Complies
C6	42	All Hours	60	Complies
R1	36	Day	48	Complies
R2	34	Day	48	Complies
R3	44	Day	48	Complies

Tables 9.7 compares the assessable noise level for music within the gym against the relevant L_{A10} Assigned Noise Levels for the critical night period, while Table 9.8 compares the assessable noise level for gym equipment against the relevant L_{AMax} Assigned Noise Levels for the critical night period

TABLE 9.7 – ASSESMENT OF NOISE LEVEL – SCENARIO 5 – GYM MUSIC

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
	Scenario 3	Time of Day	L_{A10} dB	
C1	12	All Hours	60	Complies
C2	24	All Hours	60	Complies
C3	26	All Hours	60	Complies
C4	11	All Hours	60	Complies
C5	25	All Hours	60	Complies
C6	26	All Hours	60	Complies
R1	11	Night	38	Complies
R2	31	Night	38	Complies
R3	35	Night	38	Complies

TABLE 9.8 – ASSESMENT OF NOISE LEVEL – SCENARIO 6 – GYM EQUIPMENT

Receiver Location	Assessable Noise Level, dB(A)	Assigned Noise Level, L_{A10} dB		Exceedance to Assigned Noise Level
	Scenario 3	Time of Day	L_{A10} dB	
C1	12	All Hours	80	Complies
C2	24	All Hours	80	Complies
C3	26	All Hours	80	Complies
C4	11	All Hours	80	Complies
C5	25	All Hours	80	Complies
C6	26	All Hours	80	Complies
R1	11	Night	58	Complies
R2	31	Night	58	Complies
R3	35	Night	58	Complies

Refrigerated truck deliveries have been calculated to comply at all times.

Smaller truck deliveries, such as bakery deliveries, have been calculated to comply at all times.

Noise levels associated with the typical mechanical plant assumed for the purposes of this preliminary assessment have been calculated to comply with the Assigned Noise Levels at all times.

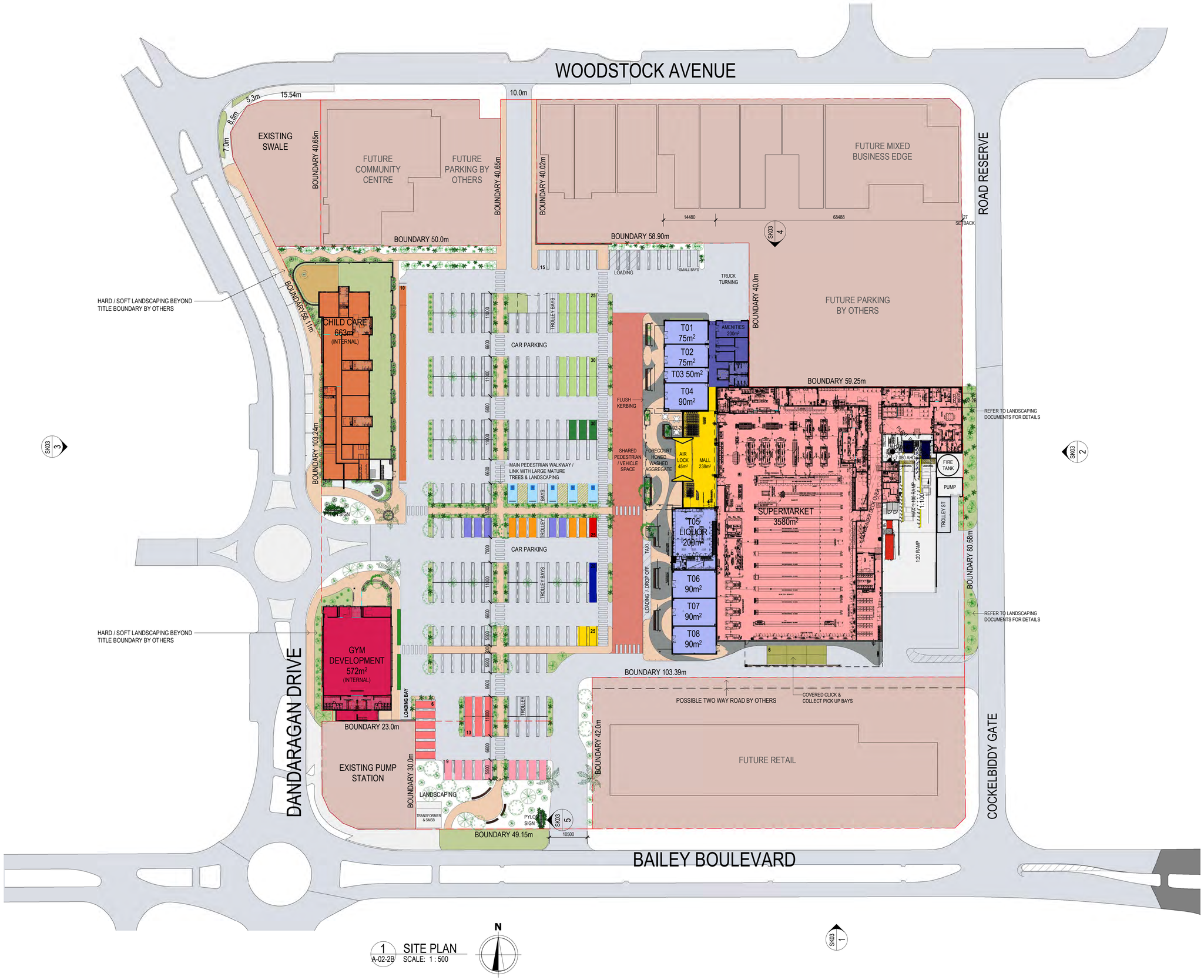
Additionally, noise emissions from outdoor play associated with the child care would comply with the Assigned Noise Levels during the day period, with the inclusion of the fencing as shown on Figure 8.1.

Finally, noise associated with the gym have also been calculated to comply with the Assigned Noise Levels at all times.

It is noted that the mechanical plant assumed in our assessment is indicative only, hence, the calculated noise levels are an indication that the control of noise emissions associated with mechanical plant and location on the roof of the proposed development, will be critical during the design phase of the development. Based on previous projects of this nature, the selection/location of exhaust fans that are utilised during the early hours of the morning (i.e. bakery and chicken cooker exhaust fans) will be critical in ensuring compliance with the Regulations is achieved.

APPENDIX A

DEVELOPMENT PLANS



1 A-02-2B SITE PLAN
SCALE: 1 : 500

CAR PARK TYPES

STANDARD PARKING	148 BAYS
DISABLED PARKING	5 BAYS
PARENTS WITH PRAMS PARKING	5 BAYS
SENIORS PARKING	5 BAYS
DROP OFF PARKING	3 BAYS
SHORT TERM PARKING	16 BAYS
TEAM MEMBER PARKING	9 BAYS
ELECTRIC PARKING	2 BAYS
EMERGENCY PARKING	1 BAYS
CLICK & COLLECT PARKING	6 BAYS
CHILD CARE	10 BAYS
GYM DEVELOPMENT	12 BAYS
MOTORCYCE PARKING	
TOTAL CAR PARKING BAYS	**222 BAYS**

EXC: PARKING OUTSIDE BOUNDARY

AREA SCHEDULE

SUPERMARKET	3580m²
(SELLING)	(2427m²)
(BACK OF HOUSE)	(1153m²)
LIQUOR STORE	200m²
SPECIALTY SHOPS	580m²
AMENITIES	200m²
AIRLOCK & MALL	280m²
TOTAL COLES BUILDING AREA	**4840m²**
CHILDCARE (INTERNAL)	663m²
CHILDCARE (EXTERNAL PLAY)	488m²
GYM	572m²

CAR PARKING REQUIREMENTS

RETAIL = 6 BAYS / 100m²

SUPERMARKET (EXCL BOH)	(2427 / 100) x 6 = 146 BAYS
LIQUOR STORE	(200 / 100) x 6 = 12 BAYS
SPECIALTY SHOPS	(580 / 100) x 6 = 35 BAYS

GYM = 1 BAY / 35m² (570 / 35) x 1 = 16 BAYS

CAR PARKING CALCULATIONS AS PER THE CITY OF MANDURAH'S FLORIDA NEIGHBOURHOOD CENTRE OUTLINE DEVELOPMENT PLAN

TOTAL BAYS REQUIRED = 209 BAYS

TOTAL SITE PARKING PROVIDED = 223 BAYS
(2.8m WIDE x 5.5m LONG BAYS)

(SURPLUS OF 14 CAR PARKING BAYS)

NOTE: PARKING CALCULATION FOR "FUTURE RETAIL" NOT INCLUDED

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K	03.12.2020	RG	REVISED ISSUE
L	18.12.2020	RG	ISSUE FOR REVIEW
M	11.01.2021	RG	DESIGN REVIEW
N	09-02-2021	DG	DESIGN REVIEW SUBMISSION

Project Name
Florida Beach Shopping Centre,
Cnr Dandaragan Drive & Bailey Boulevard
Dawesville WA

Drawing Name: **SITE PLAN**
Project Number: **20067**
Drawing No.: **SK01**
Rev.: **N**
Reduction 25mm on A1 | Scale **As indicated** | Date **June 2019** | Drawn **CG** | Checked **FI/RG**
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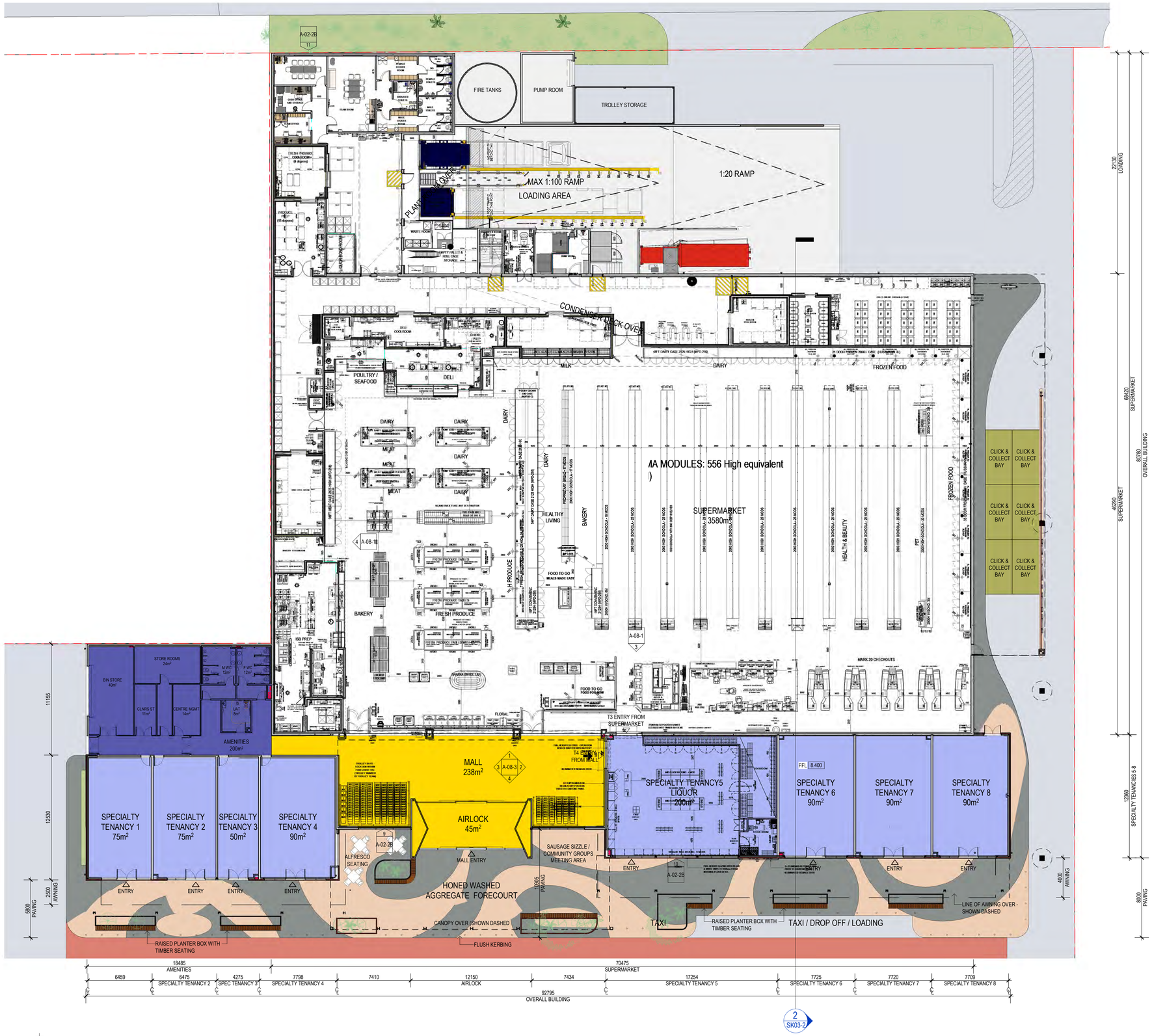

N

1 - FLOOR PLAN
SCALE: 1 : 200 @ A1

AREA SCHEDULE

SUPERMARKET	3580m²
(SELLING)	(2427m²)
(BACK OF HOUSE)	(1153m²)
LIQUOR STORE	200m²
SPECIALTY SHOPS	580m²
AMENITIES	200m²
AIRLOCK & MALL	280m²
TOTAL COLES BUILDING AREA	**4840m²**
CHILDCARE (INTERNAL)	663m²
CHILDCARE (EXTERNAL PLAY)	488m²
GYM	572m²

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RETAIL = 6 BAYS / 100m²

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CAR PARKING CALCULATIONS AS PER THE CITY OF MANDURAH'S FLORIDA NEIGHBOURHOOD CENTRE OUTLINE DEVELOPMENT PLAN

TOTAL BAYS REQUIRED = 209 BAYS

TOTAL SITE PARKING PROVIDED = 223 BAYS
(2.8m WIDE x 5.5m LONG BAYS)

(SURPLUS OF 14 CAR PARKING BAYS)

NOTE: PARKING CALCULATION FOR "FUTURE RETAIL" NOT INCLUDED

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K	03.12.2020	RG	REVISED ISSUE
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M	09-02-2021	DG	DESIGN REVIEW SUBMISSION

Project Name
Florida Beach Shopping Centre,
Cnr Dandaragan Drive & Bailey Boulevard
Dawesville WA

Drawing Name: **FLOOR PLAN**
Project Number: **20067**
Drawing No.: **SK02**
Rev.: **M**
Reduction 25mm on A1 | Scale **As indicated** | Date **June 2019** | Drawn **CG** | Checked **FI/RG**
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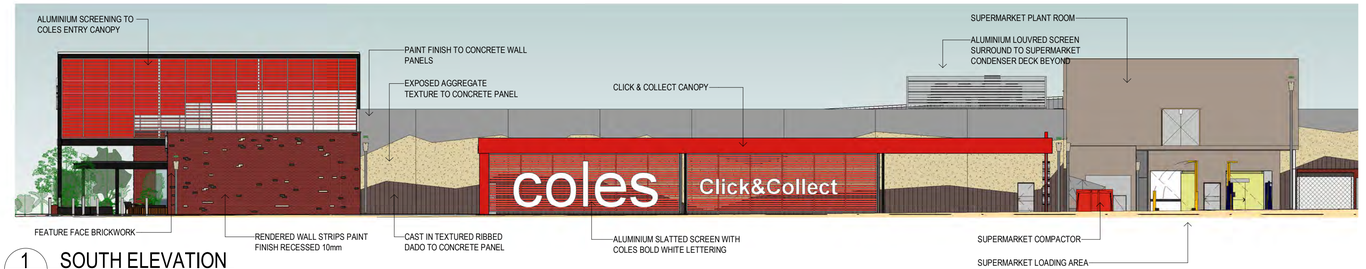
3 - WEST ELEVATION
SCALE: 1 : 200 @ A1

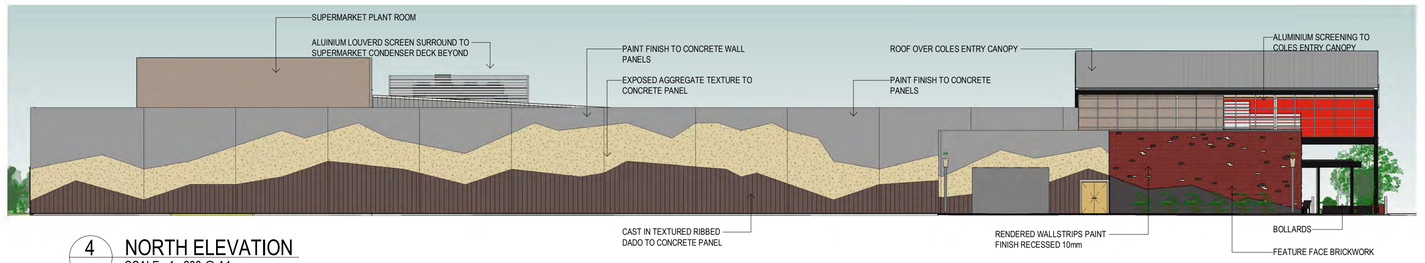
NOTE:
BUILDING SIGNAGE SHOWN INDICATIVE ONLY.
NOT PART OF THIS APPLICATION.

2 - EAST ELEVATION
SCALE: 1 : 200 @ A1



1 - SOUTH ELEVATION
SCALE: 1 : 200 @ A1

5 - PYLON SIGN ELEVATION
SCALE: 1 : 100



4 - NORTH ELEVATION
SCALE: 1 : 200 @ A1

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Rev.	Date	Issued By	Revision Description
J	06.11.2020	RG/FI	REVISED TO REFLECT UPDATED COLES EXTERNAL DESIGN STANDARDS
K	03.12.2020	RG	REVISED ISSUE
L	18.12.2020	RG	ISSUE FOR REVIEW
M	09-02-2021	DG	DESIGN REVIEW SUBMISSION

Project Name
Florida Beach Shopping Centre,
Cnr Dandaragan Drive & Bailey Boulevard
Dawesville WA

Drawing Name
ELEVATIONS

Project Number
20067

Drawing No.
SK03

Rev.
M

Reduction 25mm on A1 | Scale **As indicated** | Date **June 2019** | Drawn **CG** | Checked **FI/RG**

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1 AC301 GROUND FLOOR
SCALE: 1 : 100 @ A1

N

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Rev.	Date	Issued By	Revision Description
A	18.12.2020		ISSUED FOR REVIEW
B	11.01.2021		ISSUED FOR REVIEW
C	08.02.2021		ISSUE FOR REVIEW

Project Name
Florida Beach Shopping Centre, Cnr Dandaragan Drive & Bailey Boulevard Dawesville WA

Drawing Name
FLOOR PLAN - GYM

Project Number
20067

Drawing No. **SK07**

Rev. **C**

Reduction | 25mm on A1 | Scale **1 : 100** | Date **December 2020** | Drawn **Author** | Checked **Checker**

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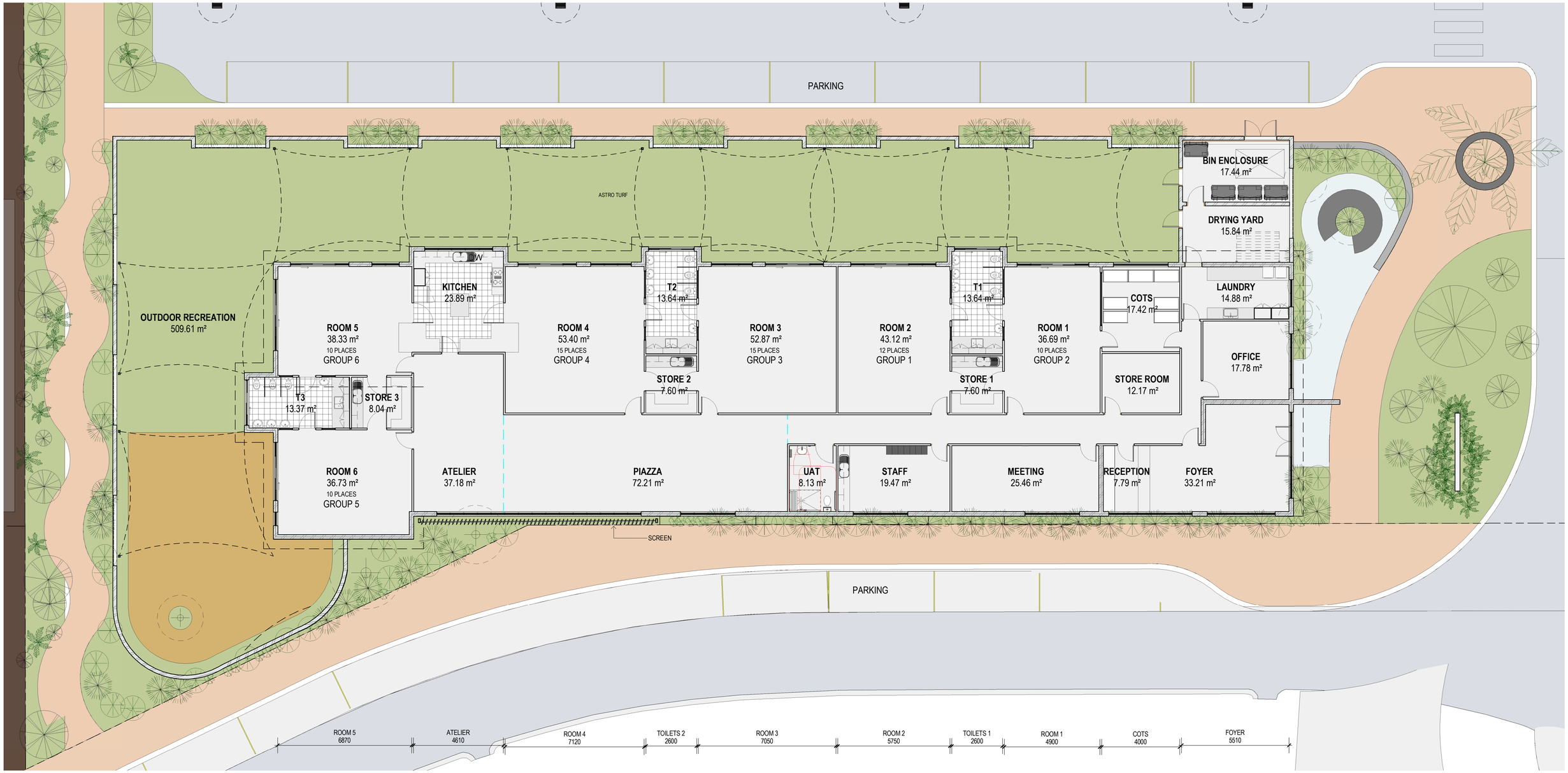

AREA SUMMARIES

- TOTAL INTERNAL - 665m²
- INTERNAL CHILD MINDING - 261.15m²
- INTERNAL PLAYSPACE - 109.39m²
- EXTERNAL PLAYSPACE - 509.68m²

CHILD MINDING ACCOMODATION

- GROUP 1 (0-24 MONTHS) - 12 PLACES
- GROUP 2 (24-36 MONTHS) - 10 PLACES
- GROUP 3 (24-36 MONTHS) - 15 PLACES
- GROUP 4 (10 x 36 MONTHS and 5 x 24-26 MONTHS) - 15 PLACES
- GROUP 5 (36 MONTHS+) - 10 PLACES
- GROUP 6 (36 MONTHS+) - 10 PLACES

N

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Rev.	Date	Issued By	Revision Description
A	18.12.2020		ISSUED FOR REVIEW
B	11.01.2021		DESIGN REVIEW
C	08.02.2021		ISSUE FOR REVIEW

Project Name
Florida Beach Shopping Centre, Cnr Dandaragan Drive & Bailey Boulevard Dawesville WA

Drawing Name
FLOOR PLAN

Project Number
20067

Drawing No. **SK10** Rev. **C**

Reduction 25mm on A1 | Scale **1 : 100** | Date **Month 2019** | Drawn **Author** | Checked **Checker**

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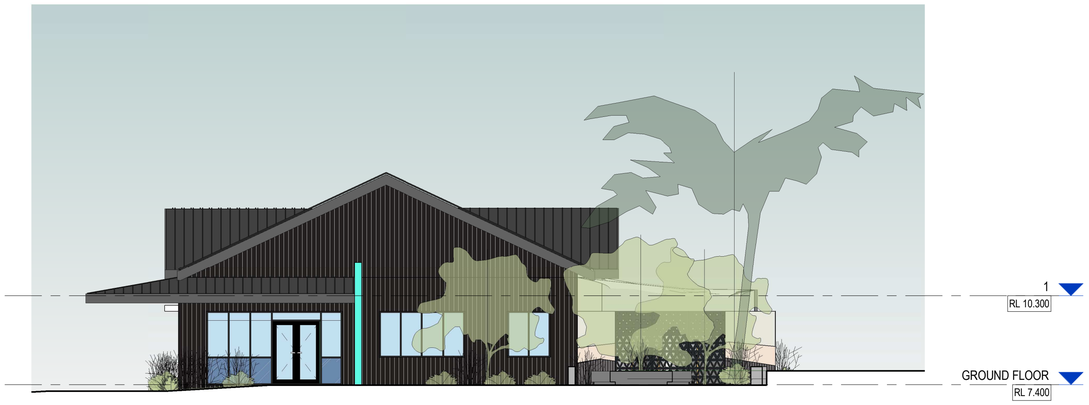
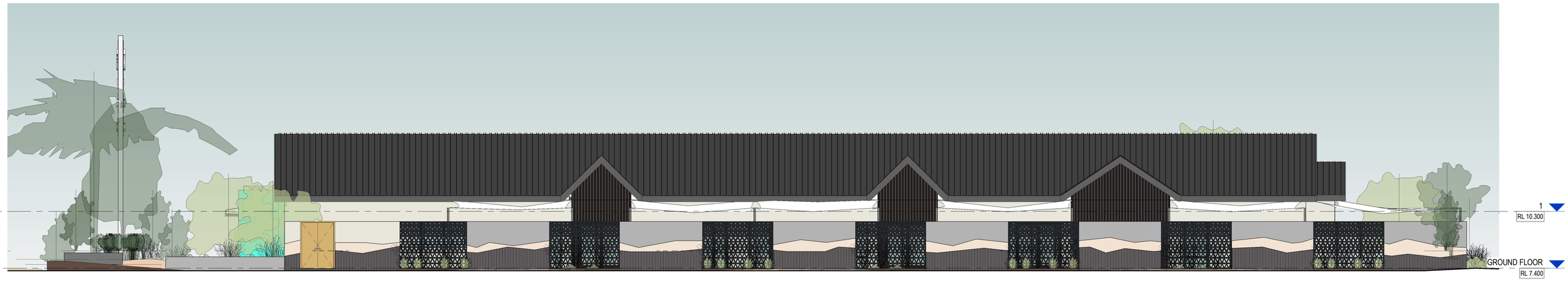
1 AB211 **WEST ELEVATION**
SCALE: 1 : 100 @ A1



2 AB211 **SOUTH ELEVATION**
SCALE: 1 : 100 @ A1

3 AB211 **NORTH ELEVATION**
SCALE: 1 : 100 @ A1



4 **EAST ELEVATION**
SCALE: 1 : 100 @ A1

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C	08.02.21		ISSUED FOR REVIEW

Project Name
Florida Beach Shopping Centre, Cnr Dandaragan Drive & Bailey Boulevard Dawesville WA

Drawing Name
ELEVATIONS

Project Number
20067

Drawing No. **SK11**

Rev. **C**

Reduction 25mm on A1 | Scale **1 : 100** | Date **Month 2019** | Drawn **Author** | Checked **Checker**

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