APPENDICES

Appendix 1	Certificate of Title
Appendix 2	Existing, approved ASP 40 (Part 1)
Appendix 3	Proposed new Part 1 for ASP 40
Appendix 4	PTA Advice on South Yanchep Station
Appendix 5	Transportation Noise Assessment (Lloyd George Acoustics, April 2020)
Appendix 6	Bushfire Management Plan (Entire Fire Management, March 2020)

APPENDIX 1 Certificate of Title

1

WESTERN AUSTRALIA

REGISTER NUMBER	
9038/DP67829	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	**N/A**

VOLUME **2926** FOLIO **205**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 9038 ON DEPOSITED PLAN 67829

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HOUSING AUTHORITY OF 99 PLAIN STREET, EAST PERTH

(AF N605641) REGISTERED 25/5/2017

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 1466/1928.
2. *EASEMENT BURDEN CREATED UNDER SECTION 167 P. & D. ACT FOR WATER PURPOSES TO WATER CORPORATION - SEE DEPOSITED PLAN 67829 AS CREATED ON DEPOSITED PLAN 67846.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP67829
PREVIOUS TITLE:	2906-93
PROPERTY STREET ADDRESS:	NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY:	CITY OF WANNEROO
RESPONSIBLE AGENCY:	DEPARTMENT OF COMMUNITIES (SSHC)

NOTE 1:		DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING M325597
NOTE 2:	N604629	DEPOSITED PLAN 67829 LODGED

APPENDIX 2 Existing, approved ASP 40 (Part 1)

2

LOT 1 & LOT 102 YANCHEP BEACH ROAD,

YANCHEP

AGREED STRUCTURE PLAN

(AS AMENDED OCTOBER 2019)

Structure Plan No. 40
Agreed: 5 November 2007

This Structure Plan was prepared under the provisions of Part 9 of City of Wanneroo District Planning Scheme No. 2

Record of Amendments made to the Agreed Structure Plan

Lot 1 & Lot 102 Yanchep Beach Road, Yanchep

Amendment No.	Description of Amendment	Finally Endorsed Council	Finally Endorsed WAPC
1.	i) Introduce Special Design Provisions and R Code Variations ii) Re Code various Apartment sites to R100 iii) Minor changes to Zoning Plan to reflect approved subdivision iv) Clarify wording related to the land subject to the Retail Floorspace allocation.	26 March 2009	10 September 2009
2.	i) Modification to Residential Density Code Plan (Plan 3) to Re Code various Apartment sites to R160 and replace R100 coding of smaller adhoc sites with an R60 coding.	6 April 2010	2 March 2011
3.	i) Inserting a new paragraph into section 6.0 outlining the statutory operation of the R80/R100 split code; ii) Amending Clause 9.6.3 to include reference to State Planning Policy 4.2; iii) Inclusion of Table 1C into Part 1 to include additional Acceptable Development provisions for single and grouped housing on R80/R100 coded lots; iv) Modifying the LSP Statutory Plan (Plan 1) and Zoning Plan (Plan 2) to reflect a modified subdivision layout; and v) Modifying the Residential Density Code Plan (Plan 3) to Re code various lots from R60 to R80/R100 and to reflect a modified subdivision layout.	28 May 2013	

4.	Modifying the Local Structure Plan Map (Plan 1) by reclassifying No. 2 Kakadu Road, Yanchep from 'Business' to 'District Centre'; and Modifying the Zoning Plan (Plan 2) by rezoning No. 2 Kakadu Road, Yanchep from 'Business Zone' to 'Commercial'.		1 November 2019

This structure plan is prepared under the provisions of the City of Wanneroo District Planning Scheme No. 2.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

5 November 2007

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b) of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

Date of Expiry: 19 October 2025

PARTS OF THE STRUCTURE PLAN

This Structure Plan comprises two separate parts;

- PART 1 – STATUTORY SECTION
- PART 2 – EXPLANATORY REPORT

Clause 9.8 of the City of Wanneroo District Planning Scheme No. 2 (hereinafter called "the Scheme") provides, amongst other things, that a provision, standard or requirements of a Structure Plan approved under Part 9 of the Scheme, shall be given the same force and effect as if it was a provision, standard or requirement of the Scheme. It is hereby provided that such force and effect shall only be given to Part 1 of this Structure Plan. Part 2 of this Structure Plan is for explanatory purposes only, providing a descriptive analysis of the Structure Plan initiatives.

Clause 9.8.3 (f) of the Scheme states that where, in the event of there being any inconsistency or conflict between any provision, requirement of standard of the Scheme and any provision requirement or standard of an agreed Structure Plan, the provision, requirement or standard of the Scheme shall prevail.

STATUTORY PLANNING SECTION

LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP

LOCAL STRUCTURE PLAN

As provided for under the provisions of the Scheme, this part of the Lot 1 and Lot 102 Structure Plan has the same force and effect as a provision, standard or requirement of the Scheme.

1.0 STRUCTURE PLAN AREA

This Structure Plan shall apply to Lot 1 and Lot 102 Yanchep Beach Road, Yanchep being the land contained within the inner edge of the broken black line shown on the Zoning Map (Plan No.2).

2.0 STRUCTURE PLAN CONTENT

This Structure Plan comprises the:

a) Statutory section (Part 1);
b) Explanatory section (Part 2);

3.0 INTERPRETATION

The words and expressions used in this Structure Plan shall have the respective meanings given to them in the Scheme.

4.0 OPERATION DATE

In accordance with sub-clause 9.8.1 of the Scheme, this Structure Plan shall come into operation when it is certified by the Commission pursuant to sub-clause 9.6.3 or adopted, signed and sealed by the Council under sub-clause 9.6.5 of the Scheme.

5.0 RELATIONSHIP WITH THE SCHEME

In accordance with clause 9.8 of the Scheme:

a) The provisions, standards and requirements specified under Part 1 of this Structure Plan shall have the same force and effect as if it were a provision, standard or requirement of the Scheme. Part 2 of this Structure Plan is for explanatory purposes only in order to provide a descriptive analysis of the Structure Plan.

b) In the event of there being any inconsistencies or conflict between the provisions, standards or requirements of the Scheme and the provisions, standards or requirements of this Structure Plan, then the provisions, standards or requirements of the Scheme shall prevail.

6.0 ZONES, RESERVES AND RESIDENTIAL DENSITY CODES

The Zoning Plan (Plan No.2) and Residential Density Code Plan (Plan No.3) delineate and depict the zones, reserves and residential density codes applicable to the structure plan area according to the legend thereon.

The zones, reserves and residential density codes designated under this structure plan apply to the land within it as if the zones, reserves and residential density code were incorporated in the Scheme.

All provisions, standards and requirements applicable to the zones, reserves and residential density codes in the Scheme shall apply, unless specific provision is made to the contrary in this Structure Plan.

Single and grouped dwelling development within the R80/R100 split coding is subject to the Residential Design Codes provisions for the R80 code and the variations set out in Table 1C. Multiple dwelling development within the R80/R100 split coding is subject to the Residential Design Code provisions for the R100 code and the variations set out in Table 1C.

7.0 STRUCTURE PLAN MAP

The Structure Plan Map (Plan No.1) outlines the planned pattern of subdivision or development for the Structure Plan area. All subdivision and development should be carried out in accordance with the principles outlined on the Structure Plan Map.

8.0 GENERAL PROVISIONS

8.1 Retail Floorspace

The Western Australian Planning Commission's Section 5AA Statement of Planning Policy No.9 – Metropolitan Centre's Policy Statement for the Perth Metropolitan Region (now SPP 4.2) designates the location of the Yanchep South District Centre in the Structure Plan area. The SPP states that the, "Shopping Floor space should generally be confined to 15,000m² unless consistent with a Commission endorsed Local Planning Strategy or Centre Plan"

Notwithstanding the SPP designation of the Centre as 'District', this Structure Plan allocates a retail net lettable area of 11,000m², with any additional retail net lettable area for this District Centre being justified in the context of overall retail modelling for the District and an amendment to the Structure Plan.

9.0 SPECIAL PROVISIONS

9.1 Environmental Management Plan

The actions as set out in the Lot 102 Yanchep Beach Road Environmental Assessment and Management Plan as specified in Schedule 12 – Environmental Conditions of the City of Wanneroo District Planning Scheme No. 2 are to be undertaken and submitted for assessment at the time of lodging a subdivision and / or development application within the Structure Plan area.

9.2 Limitation of Dwelling Units in the Yanchep-Two Rocks District

In accordance with the Western Australian Planning Commission Policy adopted on 26 October 2004 residential lot creation in the Plan Area is limited to a maximum of 200 lots until such time as Marmion Avenue is extended.

9.3 Romeo Road to Yanchep Railway Alignment Study

A Romeo Road to Yanchep Railway Alignment Study is currently being undertaken by the Western Australian Planning Commission. Following finalisation of this Study and where applicable, modifications to the Structure Plan may be required to reflect the final railway alignment.

9.4 Unexploded Ordnance

The Structure Plan area has previously been utilised as an artillery range and may contain unexploded ordnance. No subdivision or development shall be commenced prior to the Structure Plan area being cleared to the satisfaction of the Fire and Emergency Services and the City of Wanneroo of unexploded ordnance.

9.5 Employment Strategy

9.5.1

The Developer shall implement the recommendations of the Lot 102 Yanchep Beach Road Structure Plan Employment Strategy as prepared by Shrapnel Urban Planning and dated January 2006 at the subdivision and/or development stage.

9.6 Local Housing Strategy

9.6.1

The subdivider shall demonstrate, as part of any subdivision and / or development proposal, the manner in which the Key Strategy Actions identified in the Local Housing Strategy are to be addressed, to ensure adequate housing choice is available to meet the changing social and economic needs of the community. These housing types should include, but not be limited to studio apartments, group dwellings, aged persons, and mixed uses.

9.6.2

Designs and layouts shall create a street network and movement patterns that focus on the rail station and town centre and creates links that would extend the railway stations walkable catchment. At least 60% of the 800m radius catchment should be within an actual 800m walk to the railway station and town centre.

9.6.3

The City shall require the subdivider/developer to outline how any Plan will achieve the average dwelling yield targets included in the Local Housing Strategy and State Planning Policy 4.2 Activity Centres for Perth and Peel.

9.7 Residential Design Code Variations

9.7.1 Residential Design Code Variations

The following Tables 1A, 1B and 1C set out those variations to the R Codes which are deemed to constitute Acceptable Development within the Structure Plan area and where neighbour consultation and planning approval is not required.

<table>
<tr><th colspan="3">TABLE 1 A – R40
VARIATIONS TO THE 'ACCEPTABLE DEVELOPMENT' REQUIREMENTS OF THE R CODES FOR R40:</th></tr>
<tr><th>Item</th><th>Relevant R Code Clauses</th><th>Variation</th></tr>
<tr><td>Front Setback</td><td>6.2.1 A1.1 (i) & 6.2.2 A2 (i)</td><td>For lots with rear access, the front setbacks shall be:<table><tr><th></th><th>Minimum</th><th>Maximum</th><th>Average</th></tr><tr><td>Dwelling</td><td>1.5m</td><td>Not applicable</td><td>3.0m</td></tr><tr><td></td><td></td><td></td><td></td></tr></table></td></tr>
<tr><td>Boundary Walls</td><td>6.3.2 A2

6.3.2 A2 (iii)</td><td>In determining the acceptable length of any boundary wall pursuant to Clause 6.3.2 A2 (ii) of the Codes, the front setback shall mean the setback of the building itself on that boundary.
For lots with laneway access, walls on boundary are permitted to both side boundaries of a lot (excluding secondary street boundaries other than to laneways) within the following limits:<table><tr><th></th><th>Max. Height</th><th>Max. Length</th></tr><tr><td>Single Storey</td><td>3.5m*</td><td>No limit</td></tr><tr><td>Two Storey & Above</td><td>6.5m*</td><td>12 m</td></tr></table>* For dwellings with a pitched roof, the height of walls on side boundaries may be increased to the top of the ridgeline where this runs parallel to the front boundary and will abut a similarly configured wall or secondary street.</td></tr>
<tr><td>Private Open Space</td><td>6.4.1 A1 & 6.4.2 A2 – Table 1</td><td>Minimum open space to be provided will be reduced to a minimum of 30% of the site subject to the provision of;
i) A minimum 2m setback to major openings to habitable rooms located on the northernmost or easternmost boundaries;
ii) Any boundary wall (if proposed) to be built on the southernmost or westernmost side boundary (except where that boundary is to a secondary street other than to a laneway) or as otherwise depicted on an adopted Detailed Area Plan</td></tr>
</table>

<table>
<tr><th colspan="3">Table 1A Continued:</th></tr>
<tr><td>Private Open Space (continued)</td><td>6.4.1 A1 & 6.4.2 A2 – Table 1</td><td>iii) Provision of an Outdoor Living Area designed in accordance with the RD Codes and directly accessible from an internal living area on the northernmost or easternmost boundary. Where the outdoor living area is not directly accessible from an internal living area, provision of an additional outdoor living area which complies with the following criteria:
<table>
<tr><th>Min Area</th><th>Min Dimension</th><th>Other</th></tr>
<tr><td>20m²</td><td>4m</td><td>– May be included under the roof of the main dwelling
– Must be located on the northernmost or easternmost side boundary of the dwelling.</td></tr>
</table>
Note: Courtyards are permitted within the secondary street setback area.</td></tr>
<tr><td>Design for Climate</td><td>6.9.1 A1</td><td>The overshadowing provisions (Cl 6.9.1 A1) do not apply.</td></tr>
<tr><td>Additional Requirements</td><td></td><td>In addition to the Acceptable Development standards, for those lots immediately adjacent Public Open Space the following provisions shall apply:
i) must have a minimum of one habitable room with a major opening facing toward the Public Open Space area - where, for the purposes of this Clause, a “habitable room” means a room that is used for normal domestic activities and includes a living room, lounge room, sitting room, television room, kitchen, dining room, however, does not include a bedroom; and
ii) visually permeable fencing to the public open space boundary to the specification and satisfaction of the City.</td></tr>
</table>

<table>
<tr><th colspan="3">TABLE 1 B – R60
VARIATIONS TO THE 'ACCEPTABLE DEVELOPMENT' REQUIREMENTS OF THE R CODES FOR R60:</th></tr>
<tr><th>Item</th><th>Relevant R Code Clauses</th><th>Variation</th></tr>
<tr><td>Front Setbacks</td><td>6.2.1 A1.1 (i) & 6.2.2 A2 (i)</td><td>Front Setbacks:
<table>
<tr><th></th><th>Minimum</th><th>Maximum</th><th>Average</th></tr>
<tr><td>Dwelling</td><td>2m</td><td>4.0m</td><td>Not applicable</td></tr>
<tr><td>Porch, balcony, veranda or the equivalent</td><td>1.5m</td><td>3.0m</td><td>Not applicable</td></tr>
</table></td></tr>
<tr><td>Boundary Walls</td><td>6.3.2 A2

6.3.2 A2 (iii)</td><td>In determining the acceptable length of any boundary wall pursuant to Clause 6.3.2 A2 (ii) of the Codes, the front setback shall mean the setback of the building itself on that boundary.
Boundary Walls are permitted to both side boundaries of a lot (excluding secondary street boundaries other than to laneways) within the following limits:
<table>
<tr><th></th><th>Max. height</th><th>Max. length</th></tr>
<tr><td>Single Storey</td><td>3.5m*</td><td>No limit</td></tr>
<tr><td>Two Storey & Above</td><td>6.5m*</td><td>12m</td></tr>
</table>
Note: For dwelling with a pitched roof, the height of walls on side boundaries may be increased to the top of the ridgeline where this runs parallel to the front boundary and abuts a similarly configured wall or secondary street.</td></tr>
<tr><td>Private Open Space</td><td>6.4.1 A1 – Table 1

6.4.2 A2</td><td>Minimum open space to be provided is 25%.

An Outdoor Living Area is to be provided:
i) With a minimum useable space of 24m^2 and a minimum dimension of 4m;
ii) Behind the primary street setback line (it is permitted within the secondary street setback area);
iii) Located on the northernmost or easternmost boundary to maximise solar access; and</td></tr>
<tr><td>Access & Car-parking</td><td>6.5.1 A1</td><td>For any lots on the corner of a "lane to lane" or "lane to road" a minimum of one on site bay per dwelling is required and it must be covered.</td></tr>
</table>

Table1B Continued:		
Privacy	6.8.1 A1 (i), (ii) & (iii)	The setback to the boundary of major openings to active habitable spaces or their equivalent which have a floor level more than 0.5m above natural ground level and are positioned so as to overlook any part of any other residential property behind the 3m street setback line which are specified in (i) of Clause 6.8.1 A1 is to be a minimum of 4.5m in all cases.
Design for Climate	6.9.1 A1	The overshadowing provisions (Cl 6.9.1 A1) do not apply.
Special Purpose Dwellings/Ancillary Accommodation	7.1.1 A1	Ancillary accommodation is permitted on lots less than 450m^2 where abutting a laneway. Such ancillary accommodation does not require an additional car parking bay on site.
Additional Requirements		In addition to the Acceptable Development standards, for those lots immediately adjacent Public Open Space the following provisions shall apply: i) must have a minimum of one habitable room with a major opening facing toward the Public Open Space area - where, for the purposes of this Clause, a "habitable room" means a room that is used for normal domestic activities and includes a living room, lounge room, sitting room, television room, kitchen, dining room, however, does not include a bedroom; and ii) visually permeable fencing to the public open space boundary to the specification and satisfaction of the City.

<table>
<tr><th colspan="3">TABLE 1C – R80/R100
VARIATIONS TO THE 'ACCEPTABLE DEVELOPMENT' REQUIREMENTS OF THE R CODES FOR R80/R100:</th></tr>
<tr><th>Item</th><th>Relevant R Code Clauses</th><th>Variation</th></tr>
<tr><td>Minimum and Average Lot Sizes</td><td>6.1.1 A1.1 & A1.2 (i) & (ii)</td><td>Minimum Lot Size: 100m2
Average Lot Size: 120m2</td></tr>
<tr><td>Front Setbacks</td><td>6.2.1 A1.1 (i) & 6.2.2 A2 (i)</td><td>Front Setbacks:
<table>
<tr><th></th><th>Minimum</th><th>Maximum</th><th>Average</th></tr>
<tr><td>Dwelling with laneway access (rear loaded)</td><td>2m</td><td>4.0m</td><td>Not applicable</td></tr>
<tr><td>Porch, balcony, veranda or the equivalent</td><td>1.5m</td><td>3.0m</td><td>Not applicable</td></tr>
<tr><td>Dwelling with street access (front loaded)</td><td>2m</td><td>5.0m</td><td>Not applicable</td></tr>
</table>
Where vehicle access is from a primary street and parking is provided in tandem, the minimum setback for a garage is 5 metres.

Buildings are permitted up to the primary and secondary street boundary where abutting the 'Mixed Use Activity Corridor' as designated on the Local Structure Plan.</td></tr>
<tr><td>Boundary Walls</td><td>6.3.2 A2

6.3.2 A2 (iii)</td><td>In determining the acceptable length of any boundary wall pursuant to Clause 6.3.2 A2 (ii) of the Codes, the front setback shall mean the setback of the building itself on that boundary.

Boundary Walls are permitted to both side boundaries of a lot (excluding secondary street boundaries other than to laneways) within the following limits:
<table>
<tr><th></th><th>Max. height</th><th>Max. length</th></tr>
<tr><td>Single Storey</td><td>3.5m*</td><td>No limit</td></tr>
<tr><td>Two Storey & Above</td><td>7m*</td><td>17m maximum</td></tr>
</table>
*Note: For dwelling with a pitched roof, the height of walls on side boundaries may be increased to the top of the ridgeline where this runs parallel to the front boundary and abuts a similarly configured wall or secondary street.</td></tr>
<tr><td>Private Open Space</td><td>6.4.1 A1 – Table 1

6.4.2 A2</td><td>Minimum open space to be provided is 25%, except where a lot, strata lot or building fronts the designated activity corridor, in which case minimum open space is 20%.

An Outdoor Living Area is to be provided:
i. With a minimum useable space of 16m2 and a minimum</td></tr>
</table>

<table>
<tr><th colspan="3">TABLE 1C – R80/R100
VARIATIONS TO THE 'ACCEPTABLE DEVELOPMENT' REQUIREMENTS OF THE R CODES FOR R80/R100:</th></tr>
<tr><th>Item</th><th>Relevant R Code Clauses</th><th>Variation</th></tr>
<tr><td></td><td></td><td>dimension of 4m;
ii. Behind the primary street setback line (it is permitted within the secondary street setback area);</td></tr>
<tr><td>Access & Car-parking</td><td>6.5.1 A1</td><td>Car parking may be reduced to one on site bay per dwelling where:
The dwelling has a single bedroom; or
The dwelling has two bedrooms, and has a Plot Ratio Area less than 125m2, and vehicle access is provided via a rear lane.
Note: 'Plot Ratio Area' is defined in the Residential Design Codes.</td></tr>
<tr><td>Building Height</td><td>6.7.1 A1.1</td><td>Maximum building heights are as per the table below:<table><tr><th colspan="2">Maximum Building Heights</th></tr><tr><td>Top of external wall (roof above)</td><td>7 metres</td></tr><tr><td>Top of external wall (concealed roof)</td><td>7.5 metres</td></tr><tr><td>Top of pitched roof</td><td>10 metres</td></tr></table></td></tr>
<tr><td>Privacy</td><td>6.8.1 A1 (i), (ii) & (iii)</td><td>The setback to the boundary of major openings to active habitable spaces or their equivalent which have a floor level more than 0.5m above natural ground level and are positioned so as to overlook any part of any other residential property behind the 3m street setback line which are specified in (i) of Clause 6.8.1 A1 is to be a minimum of 4.5m in all cases.</td></tr>
<tr><td>Design for Climate</td><td>6.9.1 A1</td><td>The overshadowing provisions (Cl 6.9.1 A1) do not apply.</td></tr>
<tr><td>Special Purpose Dwellings/Ancillary Accommodation</td><td>7.1.1 A1</td><td>Ancillary accommodation is permitted on lots less than 450m2 where abutting a laneway.
Such ancillary accommodation does not require an additional car parking bay on site.</td></tr>
<tr><td>Additional Requirements</td><td></td><td>In addition to the Acceptable Development standards, for those lots immediately adjacent Public Open Space the following provisions shall apply:
must have a minimum of one habitable room with a major opening facing toward the Public Open Space area - where, for the purposes of this Clause, a "habitable room" means a room that is used for normal domestic activities and includes a living room, lounge room, sitting room, television room, kitchen, dining room or bedroom; and
visually permeable fencing to the public open space boundary to the specification and satisfaction of the City.</td></tr>
<tr><td>Design for Climate</td><td>6.9.1 A1</td><td>The overshadowing provisions (Cl 6.9.1 A1) do not apply.</td></tr>
</table>

9.8 Public Open Space

9.8.1 General

9.8.1.1

At the time of subdivision, the subdivider will cede free of cost to the Crown a minimum of 10% of the gross subdivisible area in accordance with the Western Australian Planning Commission's Policy D.C 2.3 'Public Open Space in Residential Areas' ('Policy DC 2.3') for public open space ('POS'). This POS requirement shall be provided in a mix of high quality areas.

9.8.1.2

The overall allocation, size and type of open spaces being provided shall be explained at a strategic level for the Structure Plan to ensure that comprehensive local open space planning is achieved on the broad scale.

9.8.1.3

The subdivider will require the Western Australian Planning Commission's approval for drainage credits towards public open space provision in accordance with Policy DC 2.3.

9.8.2 Southern Precinct

9.8.2.1

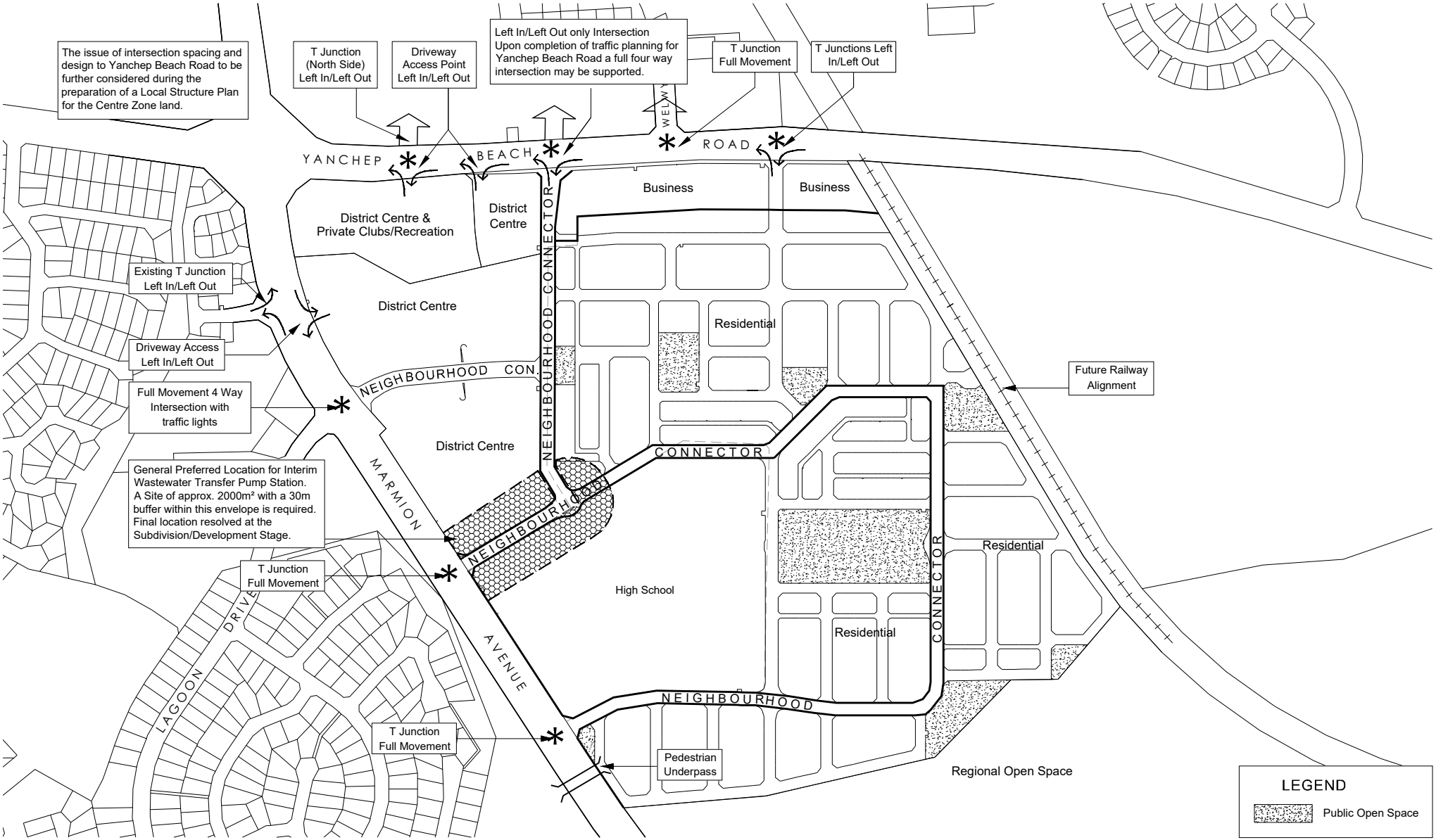
Provision of local and neighbourhood parks to support increased densities that are central to the catchment and provide for a high level of accessibility.

9.9 Interim Wastewater Transfer Pump Station

The Structure Plan depicts the general preferred location envelope for an Interim Wastewater Transfer Pump Station. A site of approximately 2000m^2 will be required with a buffer of 30m to residential land use. The final location shall be resolved at either the subdivision or development stage.

9.10 Ethnographic and Archaeological Study

At the time of subdivision the Local Government shall recommend to the Western Australian Planning Commission that an ethnographic and archaeological study be undertaken.



LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 1 - LOCAL STRUCTURE PLAN

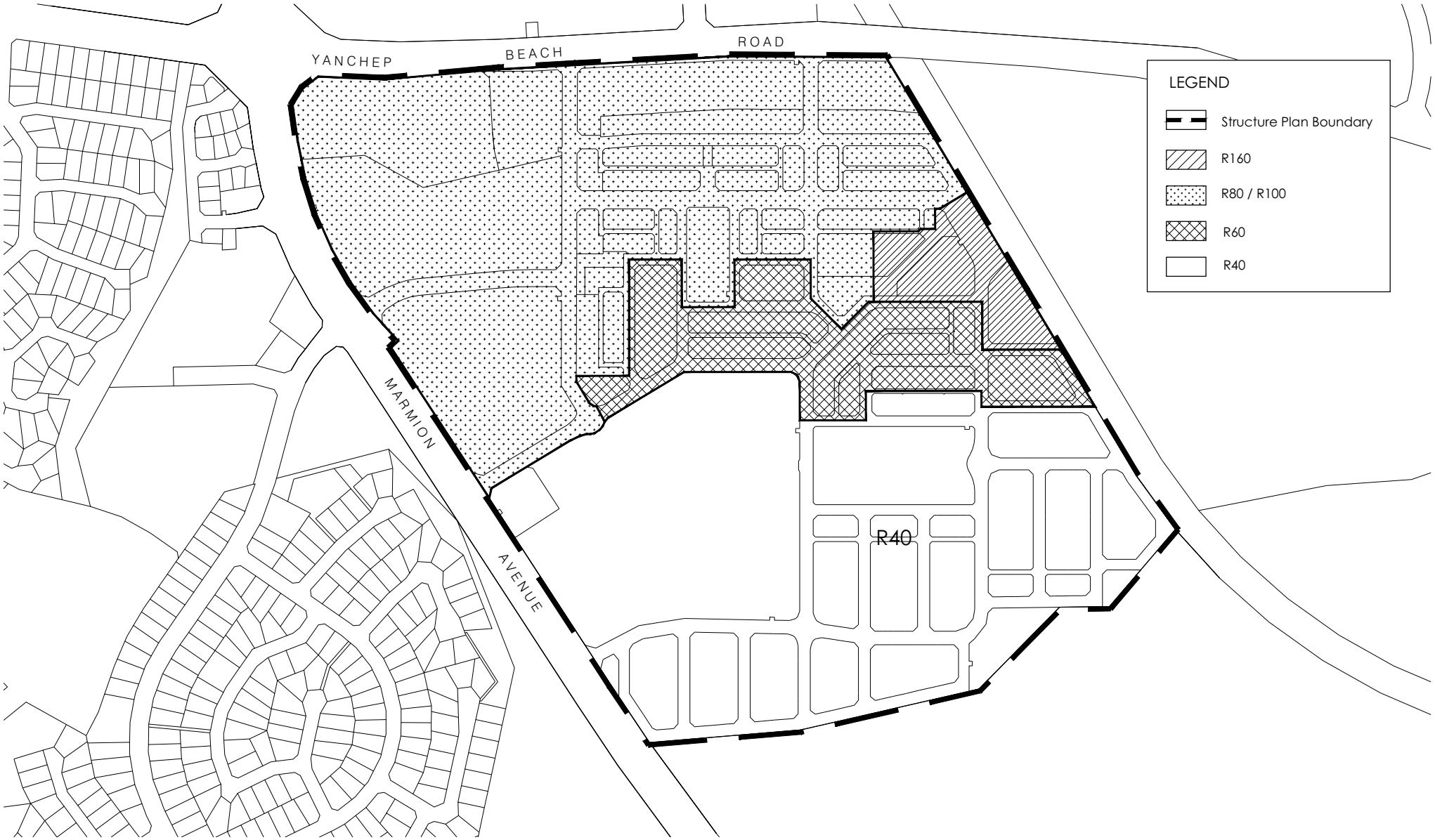
CLE TOWN PLANNING + DESIGN

2122-144B-01 (16.09.2019), Amdt 4

LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 2 - ZONING PLAN

CLE TOWN PLANNING + DESIGN

2122-145B-01 (16.09.2019), Amdt 4



LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 3 - R-CODE PLAN

CLE TOWN PLANNING + DESIGN

2122-146-01 (29.04.2013), Amdt 3

APPENDIX 3 Proposed new Part 1 for ASP 40

3

AGREED STRUCTURE PLAN NO. 40

LOTS 1 + 102 YANCHEP BEACH ROAD, YANCHEP (JINDOWIE WEST)

PART ONE | IMPLEMENTATION SECTION

Prepared by:

CLE Town Planning + Design
www.cleplan.com.au

2 Abbotsford Street
West Leederville WA 6007
PO Box 796
Subiaco WA 6904
08 9382 1233

www.cleplan.com.au

2122Rep160
July 2020

Title:	Agreed Structure Plan No. 40 Lots 1 + 102 Yanchep Beach Road, Yanchep (Jindowie West) Part One | Implementation Section
Prepared for:	Department of Communities
CLE Reference:	2122Rep160
Date:	31 July 2020
Status:	Final
Review date:	31 July 2020
Prepared by:	CLE Town Planning + Design
Project team:	Town Planning + Design - CLE Town Planning + Design Engineering - Development Engineering Consultants Hydrology - Development Engineering Consultants Environmental - Coffey Environments Bushfire - Entire Fire Management Acoustic - Lloyd George Acoustics Landscape Design - EPCAD

This amendment to Agreed Structure Plan 40 is prepared under the provisions of Part 4 of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

IT IS CERTIFIED THAT AMENDMENT NO. 5 TO AGREED STRUCTURE PLAN 40 WAS ADOPTED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON

……

Signed for and on behalf of the Western Australian Planning Commission:

……

an officer of the Commission duly authorised by the Commission pursuant to section 16 of the *Planning and Development Act 2005* for that purpose, in the presence of:

……. Witness

…….. Date

…….. Date of expiry

Table of amendments

Amendment No.	Description of Amendment	Endorsed by City of Wanneroo	Endorsed by WAPC
1	(i) Introduce Special Design Provisions and R-Code Variations (ii) Re Code various Apartment sites to R100 (iii) Minor changes to Zoning Plan to reflect approved subdivision (iv) Clarify wording related to the land subject to the Retail Floorspace allocation.	26 March 2009	10 September 2009
2	(v) Modification to Residential Density Code Plan (Plan 3) to Re Code various Apartment sites to R160 and replace R100 coding of smaller adhoc sites with an R60 coding	6 April 2010	2 March 2011
3	(vi) Inserting a new paragraph into section 6.0 outlining the statutory operation of the R80/R100 split code; (vii) Amending Clause 9.6.3 to include reference to State Planning Policy 4.2; (viii) Inclusion of Table 1C into Part 1 to include additional Acceptable Development provisions for single and grouped housing on R80/R100 coded lots; (ix) Modifying the LSP Statutory Plan (Plan 1) and Zoning Plan (Plan 2) to reflect a modified subdivision layout; and (x) Modifying the Residential Density Code Plan (Plan 3) to Re code various lots from R60 to R80/R100 and to reflect a modified subdivision layout.	28 May 2013	11 November 2011
4	Modifying the Local Structure Plan Map (Plan 1) by reclassifying No. 2 Kakadu Road, Yanchep from 'Business' to 'District Centre'; and Modifying the Zoning Plan (Plan 2) by rezoning No. 2 Kakadu Road, Yanchep from 'Business Zone' to 'Commercial'.	8 October 2019	1 November 2019
5	Rezoning the 'Mixed Use' land between the Yanchep District Centre and the defunct South Yanchep station site to 'Residential' with density codes of R40 and R60 and deleting the Activity Corridor linking the two.	TBC	TBC

CONTENTS

PLANS

1.0 STRUCTURE PLAN AREA

This structure plan applies to the land within the line identified as the 'Structure Plan Boundary' on Plan 1: Lots 1 and 102 Yanchep Beach Road, Yanchep (Jindowie West) Local Structure Plan.

2.0 STRUCTURE PLAN CONTENT

This structure plan consists of:

- Part One – Implementation Section (this section);
- Part Two – Explanatory Report (report CLE Ref. 2125-36A-01);
- Appendices – technical reports supporting the structure plan.

Part One of the Local Structure Plan comprises the structure plan map and planning provisions. Part Two and all Appendices are a reference provided to guide the interpretation and implementation of Part One.

3.0 STRUCTURE PLAN OPERATION

This structure plan is prepared in accordance with Part 4 of Schedule 2 (Deemed Provisions) in the *Planning and Development (Local Planning Schemes) Regulations 2015* ('the Regulations'). It is a Local Structure Plan fulfilling the requirements of City of Wanneroo District Planning Scheme No. 2 for the applicable 'Urban Development' zone.

The Regulations require decision-makers to have due regard for the provisions of this structure plan, which takes effect on the date on which it is approved by the Western Australian Planning Commission ('WAPC').

Unless otherwise specified in this Part, all words and expressions used in this structure plan have the same meaning as the same words and expressions in the Regulations and City of Wanneroo District Planning Scheme No. 2.

4.0 LAND USE AND SUBDIVISION

4.1 Zones and reserves

Subdivision and development of land within the structure plan area should be in accordance with the structure plan (Plans 1, 2 and 3) and the corresponding zone or reserve under City of Wanneroo District Planning Scheme No. 2.

4.2 Residential densities

4.2.1 Dwelling target

It is the objective of this structure plan to provide a minimum of 20 dwellings per gross Urban-zoned hectare, consistent with State Planning Policy 4.2: A*ctivity Centres for Perth and Peel*, and 22 dwellings per hectare of Net Developable Area, consistent with *Liveable Neighbourhoods*.

4.2.2 Residential density

The residential densities applicable to the structure plan area are shown on Plan 3.

4.2.4 Built form (R40 and R60)

The R-Codes variations specified in Planning Bulletin 112: *Medium-density single house development standards – Development Zones* and duplicated in the City of Wanneroo Local Planning Policy 4.19: *Medium-Density Housing Standards* are applicable to all land coded R40 or R60.

4.2.5 Built form (R80/R100)

Consistent with Section 5 of this structure plan, Local Development Plan/s for land coded R80/R100 are to be prepared pursuant to condition/s of subdivision approval. The Local Development Plan/s may be used to specify R-Codes variations and any other matter contemplated in the Regulations.

4.3 District Centre

A District Centre developed generally in accordance with State Planning Policy 4.2: *Activity Centres for Perth and Peel* is permitted on the land zoned 'Commercial' on the Structure Plan Map.

4.4 Public open space

A minimum of 10 per cent of the gross subdivisible area, less deductions permitted under Liveable Neighbourhoods, is to be provided as public open space. This should be provided generally in the locations shown on the Structure Plan Map.

5.0 LOCAL DEVELOPMENT PLANS

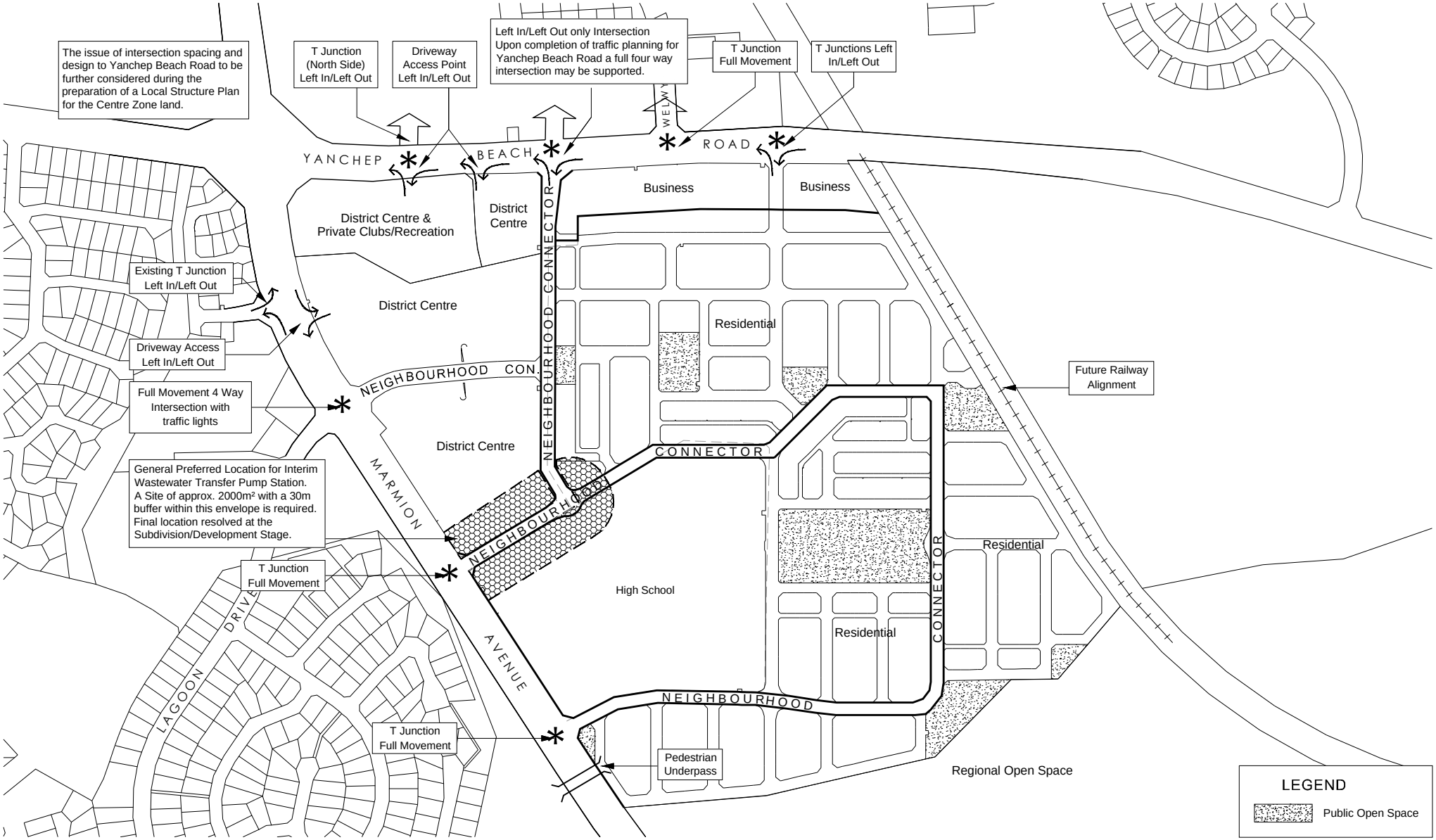
At the subdivision stage, the WAPC may impose a condition/s of approval requiring Local Development Plan/s to be prepared, in accordance with Part 6 of the Regulations, for lots that:

- Are rear-loaded;
- Abut public open space;
- Are coded R80/R100;
- Are identified for a Commercial purpose;
- Are affected by road or rail transport noise and require noise mitigation measures at the development stage

6.0 ADDITIONAL INFORMATION

At the subdivision stage, as relevant, the WAPC may require and/or impose a condition/s of approval requiring the preparation and submission of the following technical reports:

Additional Information	Approval Stage	Consultation Required
Bushfire Management Plan (BAL Contour Plan)	Subdivision (pre-approval)	City of Wanneroo WAPC
Acoustic Assessment	Subdivision (pre-approval)	City of Wanneroo WAPC
Urban Water Management Plan	Subdivision (condition of approval)	City of Wanneroo WAPC



LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 1 - LOCAL STRUCTURE PLAN

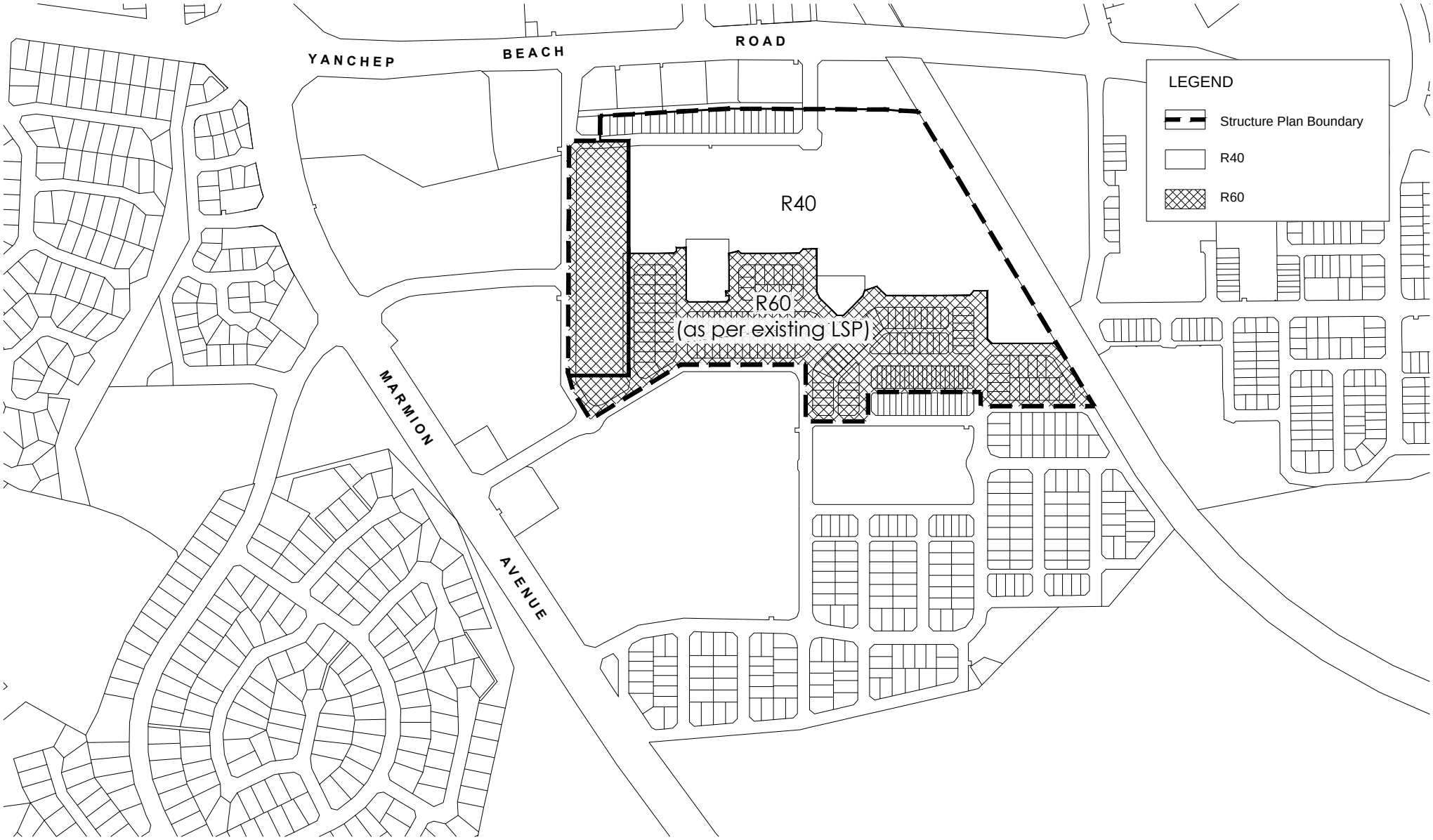
CLE Town Planning + Design
www.cleplan.com.au

2125-241-01 (16.01.2020), Amdt 4

LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 2 - ZONING PLAN

CLE Town Planning + Design
www.cleplan.com.au

2122-242-01 (16.01.2020), Amdt 4



LOT 1 & LOT 102 YANCHEP BEACH ROAD, YANCHEP
STRUCTURE PLAN No. 40
PLAN No. 3 - R-CODE PLAN

CLE Town Planning + Design
www.cleplan.com.au

2125-243A-01 (14.07.2020), Amdt 4

APPENDIX 4 PTA Advice on South Yanchep Station

4

Mark de Cruz

To: Alex Watson
Subject: RE: Jindowie Land Estate

From: Lam Sin Cho, Jade <Jade.LamSinCho@pta.wa.gov.au>
Sent: Thursday, 31 October 2019 8:04 AM
To: Stuart Sinclair <Stuart.Sinclair@housing.wa.gov.au>
Subject: Jindowie Land Estate

Hi Stuart

Thanks for your query regarding the provision for a future train station in Jindowie Land Estate (Australand) in Yanchep. The Yanchep Rail Extension will deliver three new stations, Alkimos, Eglinton and Yanchep. No future provision has been made for a station at Australand.

If you have any further queries please don't hesitate to contact me.

Regards

Jade Lam Sin Cho
Strategic Railway Network Planner | Infrastructure Planning & Land Services
Public Transport Authority of Western Australia
Level 4, Public Transport Centre, West Parade, Perth, 6000
PO Box 8125, Perth Business Centre, WA, 6849
Tel: (08) 9326 2473
Email: jade.lamsincho@pta.wa.gov.au | Web: www.pta.wa.gov.au

Please note that my working days are Monday, Tuesday, Thursday and Friday.

APPENDIX 5

Transportation Noise Assessment (Lloyd George Acoustics, April 2020)

5

Lloyd George Acoustics
PO Box 717
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Transportation Noise Assessment

Lots 9038 & 9040 Yanchep Beach Road

Structure Plan

Reference: 19105224-01A

Prepared for:
Department of Communities

Report: 19105224-01A

Lloyd George Acoustics Pty Ltd

ABN: 79 125 812 544

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M:	0439 032 844	0400 414 197	0412 611 330	0439 987 455	0457 095 555	0410 107 440

Date:	Rev	Description	Prepared By	Verified
30/01/2020	-	Issued to Client	Daniel Lloyd	Terry George
09/04/2020	A	Updated Structure Plan	Daniel Lloyd	Terry George

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Appendices

1 INTRODUCTION

The Department of Communities is developing a Structure Plan for residential development on Lots 9038 and 9040 Yanchep Beach Road, Yanchep. The land is defined by Yanchep Beach Road to the north and the future Passenger railway to the east of Lot 9038 and the west of Lot 9040.

Lloyd George Acoustics have been commissioned to undertake a transport noise assessment in accordance with the *State Planning Policy No. 5.4 Road and Rail Noise* and to prepare a report detailing the noise impacts associate with the surrounding roads and passenger railway.

The proposed structure plan is presented in *Figures 1-1 and 1-2*.

Appendix B contains a description of some of the terminology used throughout this report.

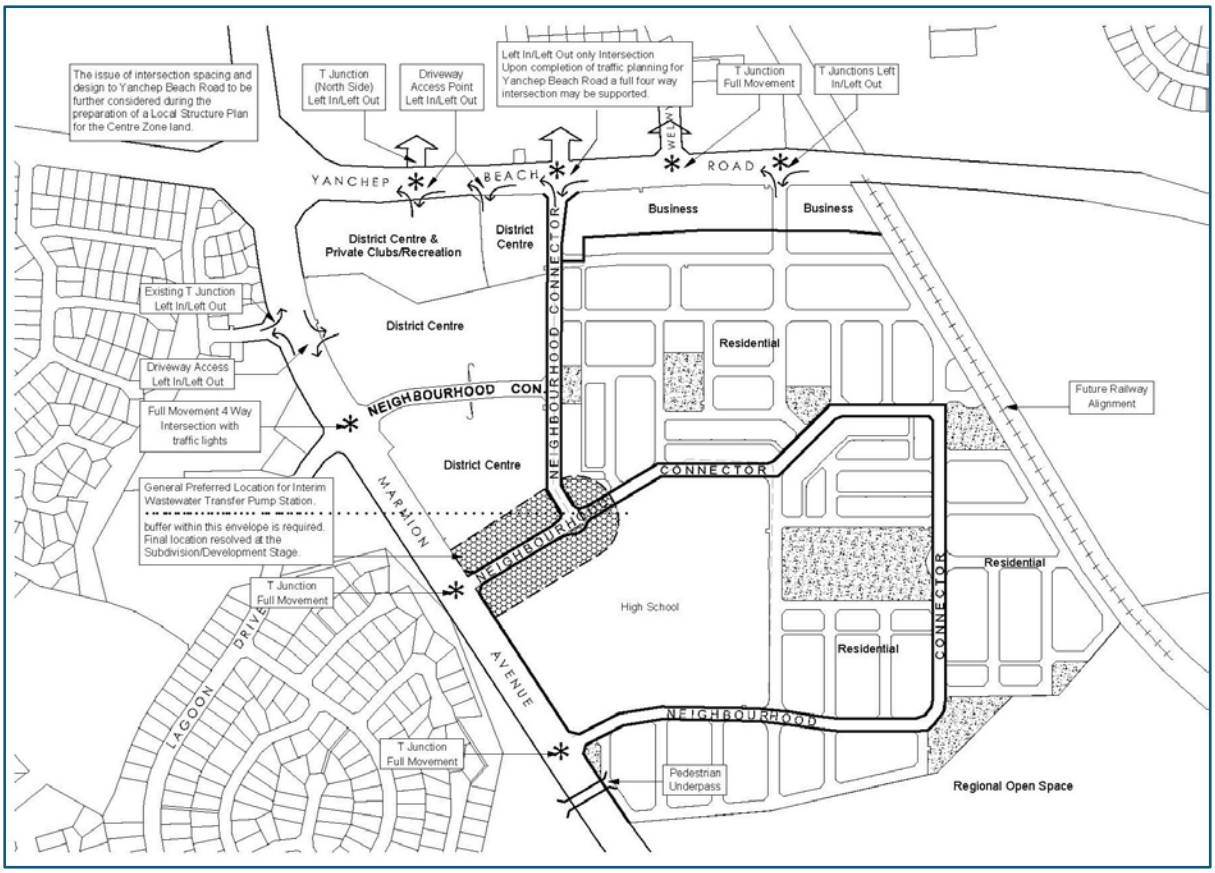


Figure 1-1 Structure Plan for Lot 9038

Figure 1-2 Concept Subdivision for Lot 9040

2 CRITERIA

The criteria relevant to this assessment is provided in *State Planning Policy No. 5.4 Road and Rail Noise* (hereafter referred to as SPP 5.4) produced by the Western Australian Planning Commission (WAPC). The objectives of SPP 5.4 are to:

- Protect the community from unreasonable levels of transport noise;
- Protect strategic and other significant freight transport corridors from incompatible urban encroachment;
- Ensure transport infrastructure and land-use can mutually exist within urban corridors;
- Ensure that noise impacts are addressed as early as possible in the planning process; and
- Encourage best practice noise mitigation design and construction standards

Table 2-1 sets out noise targets that are to be achieved by proposals under which SPP 5.4 applies. Where the targets are exceeded, an assessment is required to determine the likely level of transport noise and management/mitigation required.

Table 2-1 Noise Targets for Noise-Sensitive Land-Use

Outdoor Noise Target		Indoor Noise Target	
55 dB $L_{Aeq(Day)}$	50 dB $L_{Aeq(Night)}$	40 dB $L_{Aeq(Day)}$ (Living and Work Areas)	35 dB $L_{Aeq(Night)}$ (Bedrooms)

Notes:

- Day period is from 6am to 10pm and night period from 10pm to 6am.
- The outdoor noise target is to be measured at 1-metre from the most exposed, habitable[1] facade of the noise sensitive building.
- For all noise-sensitive land-use and/or development, indoor noise targets for other room usages may be reasonable drawn from Table 1 of Australian Standard/New Zealand Standard AS/NZS 2107:2016 Acoustics – Recommended design sound levels and reverberation times for building interiors (as amended) for each relevant time period.
- Outdoor targets are to be met at all outdoor areas as far as is reasonable and practicable to do so using the various noise mitigation measures outlined in the Guidelines.

The application of SPP 5.4 is to consider anticipated traffic volumes for the next 20 years from when the noise assessment is undertaken.

In the application of the noise targets, the objective is to achieve:

- indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses and school classrooms); and
- a reasonable degree of acoustic amenity for outdoor living areas on each residential lot. For non-residential noise-sensitive developments, for example schools and childcare centres, the design of outdoor areas should take into consideration the noise target.

It is recognised that in some instances, it may not be reasonable and/or practicable to meet the outdoor noise targets. Where transport noise is above the noise targets, measures are expected to be implemented that balance reasonable and practicable considerations with the need to achieve acceptable noise protection outcomes.

3 METHODOLOGY

Noise measurements and modelling have been undertaken generally in accordance with the requirements of SPP 5.4 and associated Guidelines[2] as described in *Section 3.1* and *Section 3.2*.

3.1 Site Measurements

Noise monitoring was undertaken at one (1) location in order to:

- Quantify the existing noise levels;
- Determine the differences between different acoustic parameters ($L_{Aeq(Day)}$ and $L_{Aeq(Night)}$); and
- Calibrate the noise model for existing conditions.

[1] A habitable room is defined in State Planning Policy 3.1 as a room used for normal domestic activities that includes a bedroom, living room, lounge room, music room, sitting room, television room, kitchen, dining room, sewing room, study, playroom, sunroom, gymnasium, fully enclosed swimming pool or patio.
[2] Road and Rail Noise Guidelines, September 2019

The measurements were taken over a two-hour period during peak times using a Rion NA28 hand-held sound level meter (S/N: 1270692) located 11 metres from the edge of Yanchep Road. The microphone was positioned 1.4 metres above ground. This instrument complies with the instrumentation requirements of *Australian Standard 2702-1984 Acoustics – Methods for the Measurement of Road Traffic Noise*. The meter was field calibrated before and after the measurement session and found to be accurate to within +/- 1 dB. Lloyd George Acoustics also holds current laboratory calibration certificate for the loggers.

The overall daytime and night-time noise levels were calculated by adjusting the hourly noise levels based on the measured hourly traffic volumes provided by Main Roads via their website.

3.2 Noise Modelling

The computer programme *SoundPLAN 8.1* was utilised incorporating the *Calculation of Road Traffic Noise* (CoRTN) algorithms for road noise and the Nordic Rail Prediction Method (Kilde Rep. 130) algorithm for train noise. Both algorithms have been modified to reflect Australian conditions.

The modifications included the following:

- Vehicles were separated into heavy (Austroads Class 3 upwards) and non-heavy (Austroads Classes 1 & 2) with non-heavy vehicles having a source height of 0.5 metres above road level and heavy vehicles having two sources, at heights of 1.5 metres and 3.6 metres above road level, to represent the engine and exhaust respectively. By splitting the noise source into three, allows for less barrier attenuation for high level sources where barriers are to be considered.
- Note that a -8.0 dB correction is applied to the exhaust and -0.8 dB to the engine (based on Transportation Noise Reference Book, Paul Nelson, 1987), so as to provide consistent results with the CoRTN algorithms for the no barrier scenario;
- Adjustments of -0.8 dB and -1.7 dB have been applied to the predicted levels for the 'free-field' and 'at facade' cases respectively, based on the findings of *An Evaluation of the U.K. DoE Traffic Noise Prediction*; Australian Road Research Board, Report 122 ARRB – NAASRA Planning Group (March 1983).
- Train modification to align with measured noise levels of passenger trains operating in the Perth region. Measured noise levels used are shown in *Table 3-1*.

Table 3-1 Sound Pressure Levels Used in the Noise Model

Description	dB(A) at One-Third Octave Frequencies (Hz)									Overall dB(A)
	31.5	63	125	250	500	1K	2K	4K	8K	
Train speed of 130 km/hr at a distance of 15m	30	51	59	62	73	79	79	77	69	87
	35	54	61	65	73	79	80	74	64	
	42	53	61	69	78	80	78	72	58	

Predictions are made at heights of 1.4 m above ground floor level for single storey houses. The noise is predicted at 1.0 metre from an assumed building facade resulting in a + 2.5 dB correction due to reflected noise.

Various input data are included in the modelling such as ground topography, road design, traffic volumes etc. These model inputs are discussed in the following sections.

3.2.1 Ground Topography

Topographical data for this project was provided by CLE Plan. As this project is only at "Structure Plan" stage, information on subdivision levels are preliminary only and therefore the modelling uses the preliminary earthworks topography.

The approximate location of future houses have also been included as these can provide barrier attenuation when located between a source and receiver, in much the same way as a hill or wall provides noise shielding. All buildings are assumed to be single storey with a height of 3.5 metres.

3.2.2 Traffic Data

Traffic data includes:

- Road Surface – The noise relationship between different road surface types is shown in *Table 3-2*.

Table 3-2 Noise Relationship Between Different Road Surfaces

Road Surfaces						
Chip Seal			Asphalt			
14mm	10mm	5mm	Dense Graded	Novachip	Stone Mastic	Open Graded
+3.5 dB	+2.5 dB	+1.5 dB	0.0 dB	-0.2 dB	-1.5 dB	-2.5 dB

The existing and future road surface on Yanchep Beach Road is assumed to be dense graded asphalt.

- Vehicle Speed – The existing and future posted speed is assumed to be 80km/hr.
- Traffic Volumes – 2016 and 2041 traffic volumes were provided by Main Roads WA (Clare Yu ref: 41352). *Table 3-3* provides the traffic volume input data in the model.

Table 3-3 Traffic Information Used in the Modelling

Parameter	2016			2041		
	Eastbound	Westbound	% Heavy	Eastbound	Westbound	% Heavy
24 Hour Volume	5,200	4,100	1	21,400	21,300	1

Note: 18 hour volumes used in the CoRTN algorithms are assumed to be 94% of 24-hour volumes

3.2.3 Train Movements

The number of train movements assumed in the model has been provided by PTA and are detailed in *Table 3-4*.

Table 3-4 Daily Rail Movements Assumed in the Modelling

Train Description	Train Movements	
	Day	Night
Northbound		
6 Car Sets	75	22
Southbound		
6 Car Sets	75	22

3.2.4 Ground Attenuation

The ground attenuation has been assumed to be 0.0 (0%) for the road, 0.75 (75%) throughout the subdivision, except for the public open space, which was set to 1.00 (100%). Note 0.0 represents hard reflective surfaces such as water and 1.00 represents absorptive surfaces such as grass.

3.2.5 Parameter Conversion

The CoRTN algorithms used in the *SoundPLAN* modelling package were originally developed to calculate the $L_{A10,18hour}$ traffic noise level. SPP 5.4 however uses $L_{Aeq(Day)}$ and $L_{Aeq(Night)}$. The relationship between the parameters varies depending on the composition of traffic on the road (volumes in each period and percentage heavy vehicles).

As noise monitoring was undertaken, the relationship between the parameters is based on the results of the monitoring – refer *Section 4.1*.

4 RESULTS

4.1 Noise Measurements

The results of the noise measurements are summarised in *Table 4-1*.

Table 4-1 Measured Noise Levels

Date	Average Weekday Noise Level, dB		
	Hourly (0600 & 0700)	$L_{Aeq\ (Day)}$	$L_{Aeq\ (Night)}$
2 December 2019	62.0	60.8	54.2

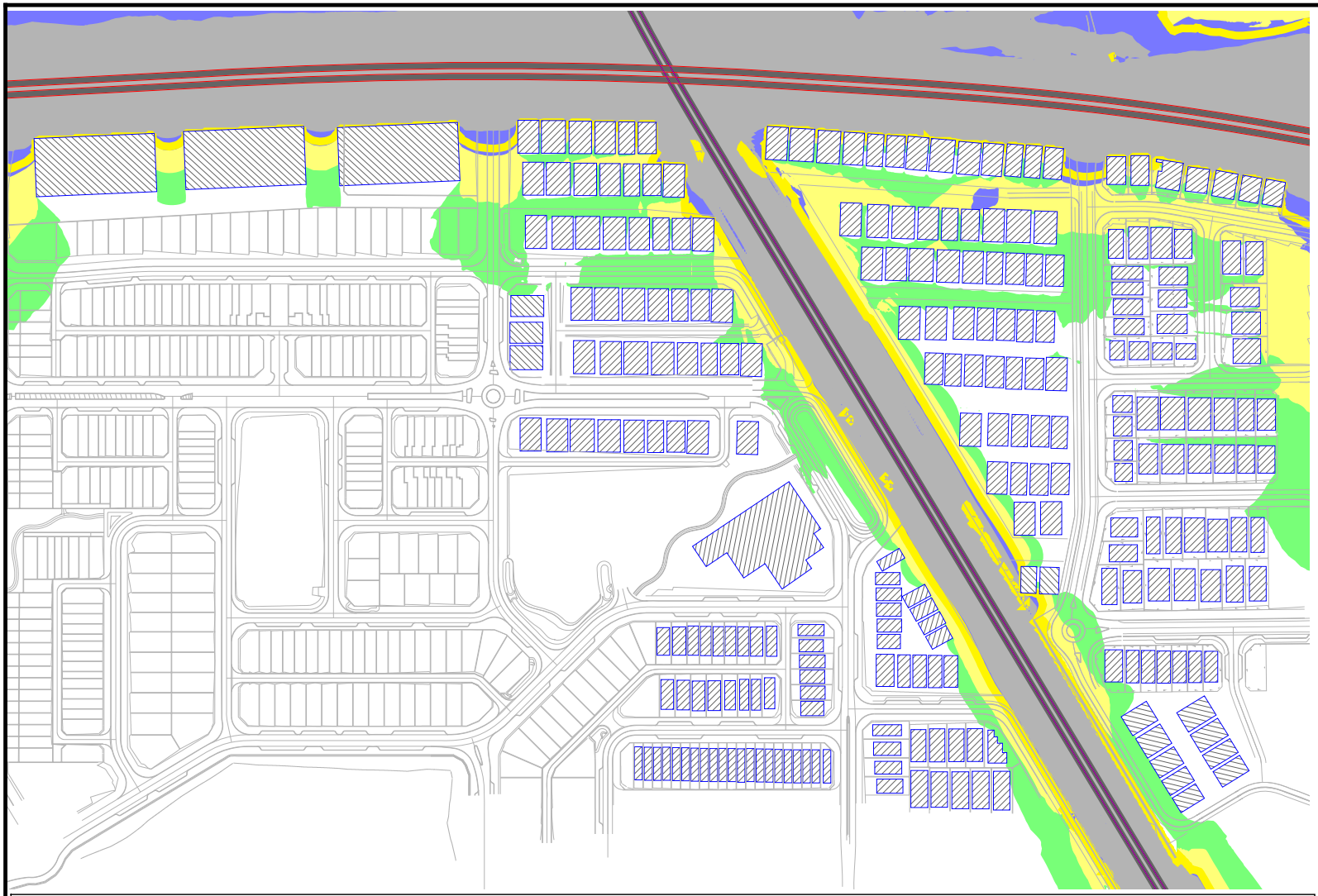
The average differences between the weekday $L_{Aeq(Day)}$ and $L_{Aeq(Night)}$ is 6.6 dB. This same difference has been assumed to exist in future years. As such, it is the daytime noise levels that will dictate compliance since these are at least 5 dB more than night-time levels.

This data is also used to calibrate the noise model. This is achieved by predicting the traffic noise level at the noise measurement location assuming the existing traffic volumes and comparing these results against the measured values. The results of the calibration showed that the model was over predicting by 2.1 dB and the results of the modelling have been adjusted accordingly.

4.2 Noise Modelling

The results of the noise modelling for future conditions is provided in *Figure 4-1* as an $L_{Aeq\ (Day)}$ noise level contour plot. It can be seen that predicted noise levels at the nearest houses will be above the *target* and therefore noise control is to be considered.

Figure 4-1



Noise levels
$L_{Aeq,Day}$ dB

<= 55	
<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (Sep 2019)

Signs and symbols

- Building
- Road
- Railway

N

Length Scale

0 20 40 80 120 160 m

Lots 9038 & 9040 Yanchep Beach Road
Predicted Noise Level Contours - No Noise Mitigation

$L_{Aeq(Day)}$ Noise Level Contours
Ground Floor Level

SoundPlan v8.1
CoRTN & Nordic Algorithms

7 January 2020

Lloyd George Acoustics
PO Box 717
HILLARYS WA 6923
(08) 9401 7770

5 ASSESSMENT

The objectives of SPP 5.4 are to achieve:

- indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses and school classrooms); and
- a reasonable degree of acoustic amenity for outdoor living areas on each residential lot.

Where the outdoor noise targets of *Table 2-1* are achieved, no further controls are necessary.

With reference to the predicted noise levels in *Section 4.2*, it is evident the outdoor noise target will be exceeded.

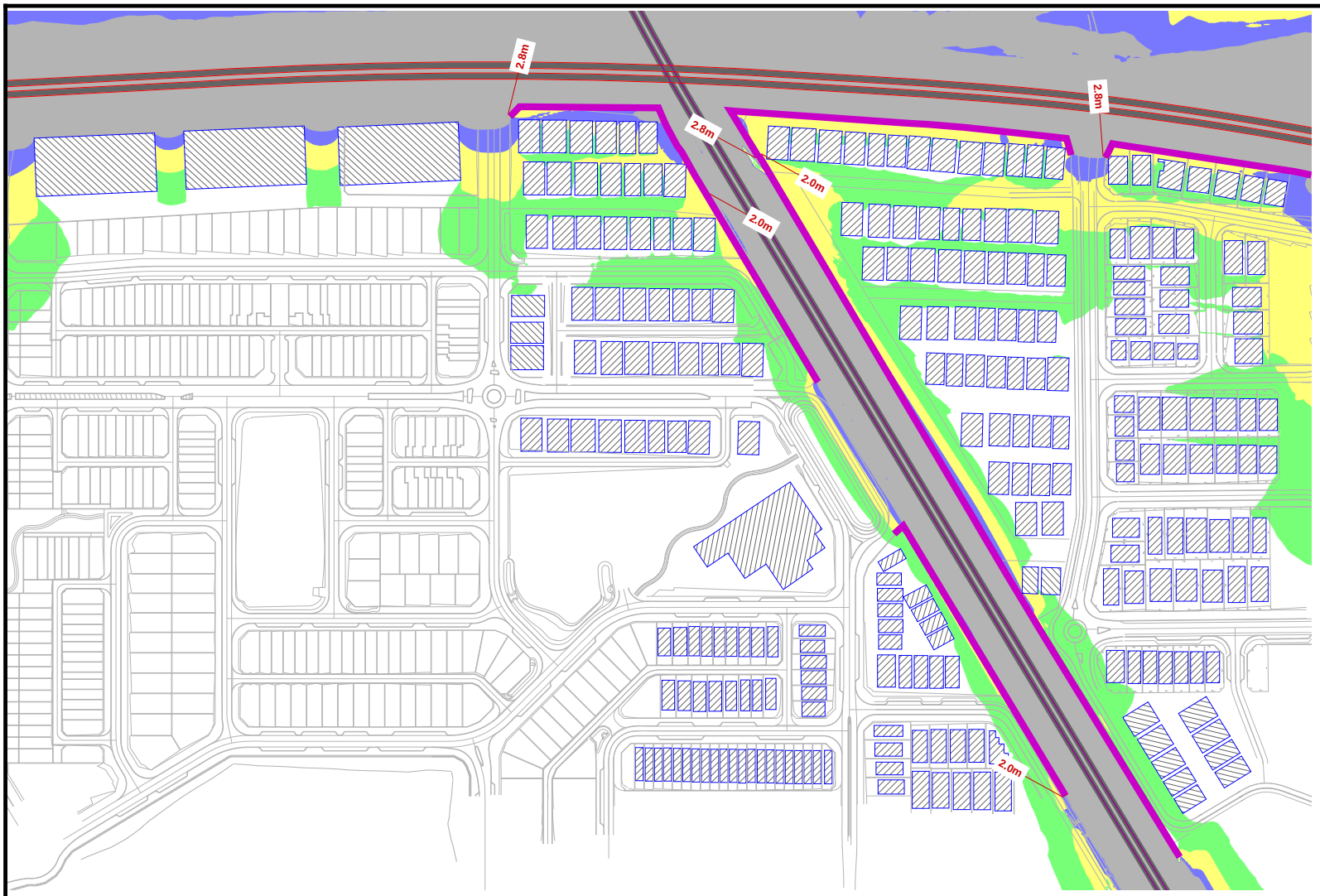
As this project is only at "Structure Plan" phase, the suggested noise mitigation measures are indicative only. They have been designed to achieve a reasonable degree of amenity and facade packages may also be required to achieve compliance with SPP 5.4.

Therefore our preliminary recommendations are:

- Construct noise barriers as shown in *Figure 5-1*. The noise barrier is to be solid, free of gaps and of minimum surface mass 15kg/m^2. Alternatively, an earth bund could be constructed.
- Where lots are still above the outdoor noise target (refer *Figure 5-1*), the following Packages (refer *Appendix A*) are required:
    - Package A where noise levels are between 56 dB and 58 dB $L_{Aeq(Day)}$;
    - Package B where noise levels are between 59 dB and 62 dB $L_{Aeq(Day)}$;
    - Package C where noise levels are between 63 dB and 66 dB $L_{Aeq(Day)}$;

      Alternative constructions from the deemed to satisfy packages may be acceptable if supported by a report undertaken by a suitably qualified acoustical consultant (member from of the Association of Australasian Acoustical Consultants (AAAC)), once the lots specific building plans are available.
- All affected lots are to have notifications on lot titles as per SPP 5.4 requirements – refer *Appendix A*.

Figure 5-1



Noise levels
$L_{Aeq,Day}$ dB

<= 55	
<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (Sep 2019)

Signs and symbols

- Building
- Road
- Railway
- Wall

N

Length Scale

0 20 40 80 120 160 m

Lots 9038 & 9040 Yanchep Beach Road
Predicted Noise Level Contours - With Noise Mitigation

$L_{Aeq(Day)}$ Noise Level Contours
Ground Floor Level

SoundPlan v8.1
CoRTN & Nordic Algorithms

7 January 2020

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Appendix A

ACCEPTABLE TREATMENT PACKAGES

The packages and information provided on the following pages are taken from *Road and Rail Noise Guidelines* (September 2019).

Where outdoor and indoor noise levels received by a noise-sensitive land-use and/or development exceed the policy's noise target, implementation of quiet house requirements is an acceptable solution.

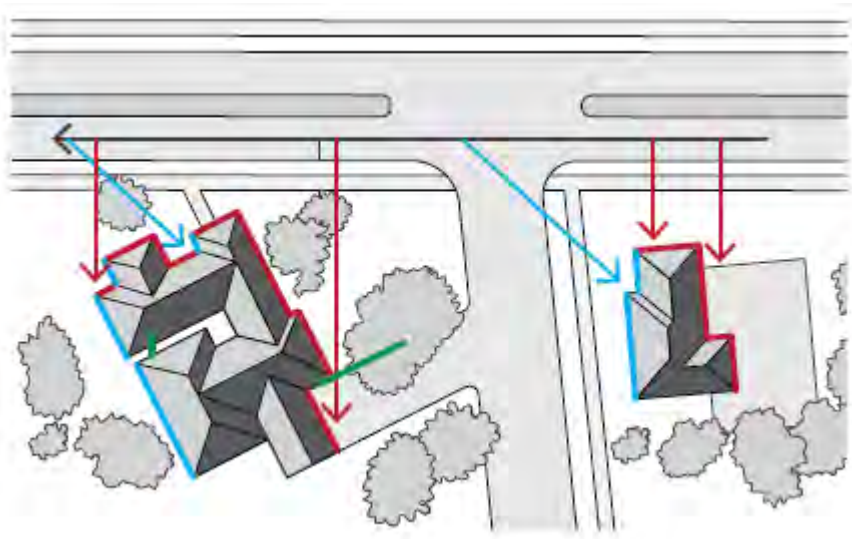
The quiet house packages are not the only solution to achieving acceptable internal transport noise levels. A suitably qualified acoustical engineer or consultant may also determine more tailored acoustic design requirements for buildings in a transport noise corridor by carrying out acoustic design in accordance with relevant industry standards. This includes the need to meet the relevant design targets specified in AS/NZS 2107:2016 for road traffic noise.

With regards to the packages, the following definitions are provided:

- **Facing** the transport corridor (red): Any part of a building façade is 'facing' the transport corridor if any straight line drawn perpendicular (at a 90 degree angle) to its nearest road lane or railway line intersects that part of the façade without obstruction (ignoring any fence).

- **Side-on** to transport corridor (blue): Any part of a building façade that is not 'facing' is 'side-on' to the transport corridor if any straight line, at any angle, can be drawn from it to intersect the nearest road lane or railway line without obstruction (ignoring any fence).

- **Opposite** to transport corridor (green): Neither 'side on' nor 'facing', as defined above.



Quiet House Package A

56-58 dB $L_{Aeq(Day)}$ & 51-53 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): o Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing; o Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$): o Sealed awning or casement windows with minimum 6mm glass.	• Up to 40% floor area ($R_w + C_{tr} \geq 25$): o Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing; • Up to 60% floor area ($R_w + C_{tr} \geq 28$); • Up to 80% floor area ($R_w + C_{tr} \geq 31$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	No specific requirements	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.	• Doors to achieve $R_w + C_{tr} \geq 25$: o 35mm Solid timber core hinged door and frame system certified to R_w 28 including seals; o Glazed sliding door with 10mm glass and weather seals.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less.	
	Opposite	No specific requirements	
External Walls	All	• $R_w + C_{tr} \geq 45$: o Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; o Single leaf of 150mm brick masonry with 13mm cement render on each face. o One row of 92mm studs at 600mm centres with: ▪ Resilient steel channels fixed to the outside of the studs; and ▪ 9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside; ▪ 75mm thick mineral wool insulation with a density of at least 11kgkg/m^3; and ▪ 2 x 16mm fire-rated plasterboard to inside.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: o Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level.	

Quiet House Package B

59-62 dB $L_{Aeq(Day)}$ & 54-57 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): o Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): o Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): o Sliding or double hung with 6mm-12mm-10mm double insulated glazing; o Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$); • Up to 80% floor area ($R_w + C_{tr} \geq 34$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass.	• Doors to achieve $R_w + C_{tr} \geq 28$: o 40mm Solid timber core hinged door and frame system certified to R_w 32 including seals; o Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: o Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). Resilient ties used where required to connect leaves. o Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). o Single leaf of 220mm brick masonry with 13mm cement render on each face. o 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. o Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (R2.0+) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: o Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Quiet House Package C

63-66 dB $L_{Aeq(Day)}$ & 58-61 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Windows	Facing	• Up to 20% floor area ($R_w + C_{tr} \geq 31$): o Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 40% floor area ($R_w + C_{tr} \geq 34$): o Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): o Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): o Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Not recommended.	• Doors to achieve $R_w + C_{tr} \geq 30$: o Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass; o 40mm Solid timber core side hinged door, frame and seal system certified to R_w 32 including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: o Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). Resilient ties used where required to connect leaves. o Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 50mm glasswool or polyester insulation (R2.0+). o Single leaf of 220mm brick masonry with 13mm cement render on each face. o 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. o Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (R2.0+) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 40$: o Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; o R3.0+ insulation batts above ceiling; o 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor and/or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Mechanical Ventilation requirements

In implementing the acceptable treatment packages, the following mechanical ventilation / air-conditioning considerations are required:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of R_w 40 dB into sensitive spaces;
- Evaporative systems require attenuated ceiling air vents to allow closed windows;
- Refrigerant based systems need to be designed to achieve National Construction Code fresh air ventilation requirements;
- Openings such as eaves, vents and air inlets must be acoustically treated, closed or relocated to building sides facing away from the corridor where practicable.

Notification

Notifications on title advise prospective purchasers of the potential for noise impacts from major transport corridors and help with managing expectations.

The Notification is to state as follows:

This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.

Appendix B

Terminology

The following is an explanation of the terminology used throughout this report.

Decibel (dB)
The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

A-Weighting
An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A dB.

L_1
An L_1 level is the noise level which is exceeded for 1 per cent of the measurement period and is considered to represent the average of the maximum noise levels measured.

L_{10}
An L_{10} level is the noise level which is exceeded for 10 per cent of the measurement period and is considered to represent the "*intrusive*" noise level.

L_{90}
An L_{90} level is the noise level which is exceeded for 90 per cent of the measurement period and is considered to represent the "*background*" noise level.

L_{eq}
The L_{eq} level represents the average noise energy during a measurement period.

$L_{A10,18hour}$
The $L_{A10,18\ hour}$ level is the arithmetic average of the hourly L_{A10} levels between 6.00 am and midnight. The *CoRTN* algorithms were developed to calculate this parameter.

$L_{Aeq,24hour}$
The $L_{Aeq,24\ hour}$ level is the logarithmic average of the hourly L_{Aeq} levels for a full day (from midnight to midnight).

$L_{Aeq,8hour}$ / $L_{Aeq\ (Night)}$
The $L_{Aeq\ (Night)}$ level is the logarithmic average of the hourly L_{Aeq} levels from 10.00 pm to 6.00 am on the same day.

$L_{Aeq,16hour}$ / $L_{Aeq\ (Day)}$
The $L_{Aeq\ (Day)}$ level is the logarithmic average of the hourly L_{Aeq} levels from 6.00 am to 10.00 pm on the same day. This value is typically 1-3 dB less than the $L_{A10,18hour}$.

Noise-sensitive land use and/or development
Land-uses or development occupied or designed for occupation or use for residential purposes (including dwellings, residential buildings or short-stay accommodation), caravan park, camping ground, educational establishment, child care premises, hospital, nursing home, corrective institution or place of worship.

About the Term 'Reasonable'

An assessment of reasonableness should demonstrate that efforts have been made to resolve conflicts without comprising on the need to protect noise-sensitive land-use activities. For example, have reasonable efforts been made to design, relocate or vegetate a proposed noise barrier to address community concerns about the noise barrier height? Whether a noise mitigation measure is reasonable might include consideration of:

- The noise reduction benefit provided;
- The number of people protected;
- The relative cost vs benefit of mitigation;
- Road conditions (speed and road surface) significantly differ from noise forecast table assumptions;
- Existing and future noise levels, including changes in noise levels;
- Aesthetic amenity and visual impacts;
- Compatibility with other planning policies;
- Differences between metropolitan and regional situations and whether noise modelling requirements reflect the true nature of transport movements;
- Ability and cost for mobilisation and retrieval of noise monitoring equipment in regional areas;
- Differences between Greenfield and infill development;
- Differences between freight routes and public transport routes and urban corridors;
- The impact on the operational capacity of freight routes;
- The benefits arising from the proposed development;
- Existing or planned strategies to mitigate the noise at source.

About the Term 'Practicable'

'Practicable' considerations for the purposes of the policy normally relate to the engineering aspects of the noise mitigation measures under evaluation. It is defined as "reasonably practicable having regard to, among other things, local conditions and circumstances (including costs) and to the current state of technical knowledge" (*Environmental Protection Act 1986*). These may include:

- Limitations of the different mitigation measures to reduce transport noise;
- Competing planning policies and strategies;
- Safety issues (such as impact on crash zones or restrictions on road vision);
- Topography and site constraints (such as space limitations);
- Engineering and drainage requirements;
- Access requirements (for driveways, pedestrian access and the like);
- Maintenance requirements;
- Bushfire resistance or BAL ratings;
- Suitability of the building for acoustic treatments.

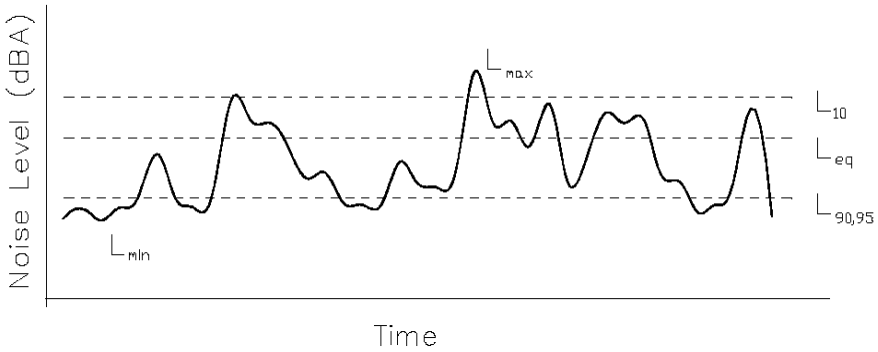
R_w

This is the weighted sound reduction index and is similar to the previously used STC (Sound Transmission Class) value. It is a single number rating determined by moving a grading curve in integral steps against the laboratory measured transmission loss until the sum of the deficiencies at each one-third-octave band, between 100 Hz and 3.15 kHz, does not exceed 32 dB. The higher the R_w value, the better the acoustic performance.

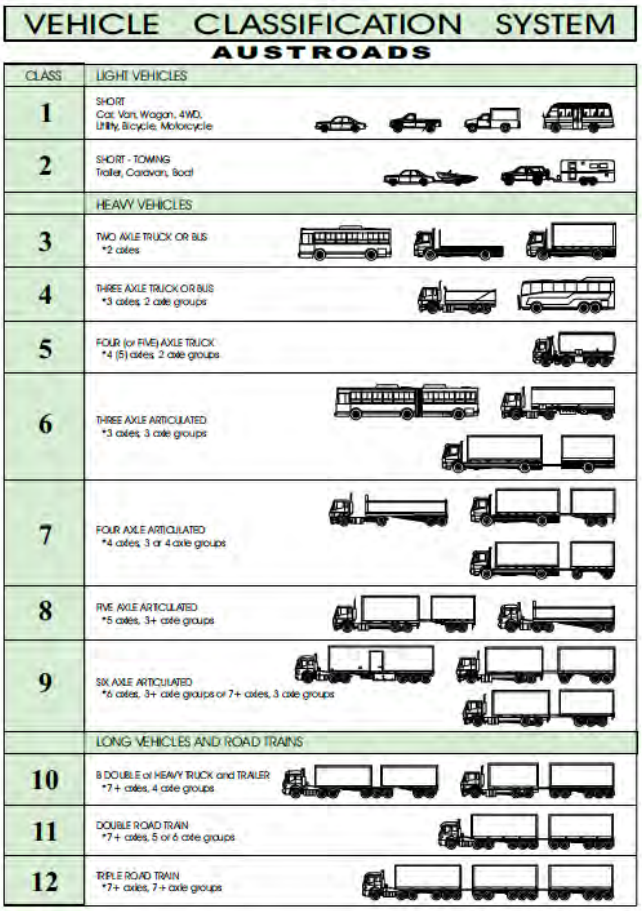
C_{tr}

This is a spectrum adaptation term for airborne noise and provides a correction to the R_w value to suit source sounds with significant low frequency content such as road traffic or home theatre systems. A wall that provides a relatively high level of low frequency attenuation (i.e. masonry) may have a value in the order of –4 dB, whilst a wall with relatively poor attenuation at low frequencies (i.e. stud wall) may have a value in the order of -14 dB.

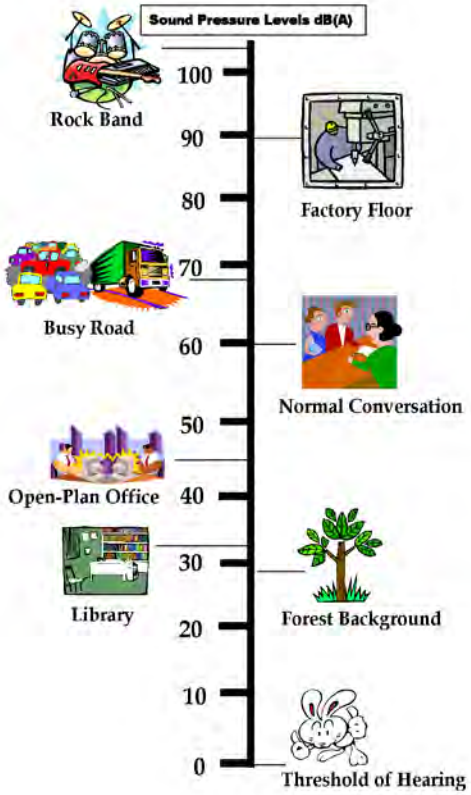
Chart of Noise Level Descriptors



Austroads Vehicle Class



Typical Noise Levels



APPENDIX 6 Bushfire Management Plan (Entire Fire Management March 2020)

6

AS 3959 Bushfire Contour & Bushfire Hazard Level Report

Site Details			
Address:	Jindowie		
Suburb:	Yanchep	**Postcode:**	6035
Local Government Area:	City of Wanneroo		
Description of Building Works:	Redevelopment		

Report Details			
Report Number:	2-2824	**Report Revision:**	1
Assessment Date:	19/03/2020	**Report Date:**	31/03/2020

BPAD Accredited Practitioner Details	
Name:	Gavin Fancote
Company Details:	Entire Fire Management

I hereby certify that I have undertaken the assessment of the above-mentioned site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959 -2009 (Method 1)

I hereby declare that I am a BPAD accredited bushfire practitioner.

Accreditation No.	BPAD37922
Signature:	

Authorised Practitioner Stamp

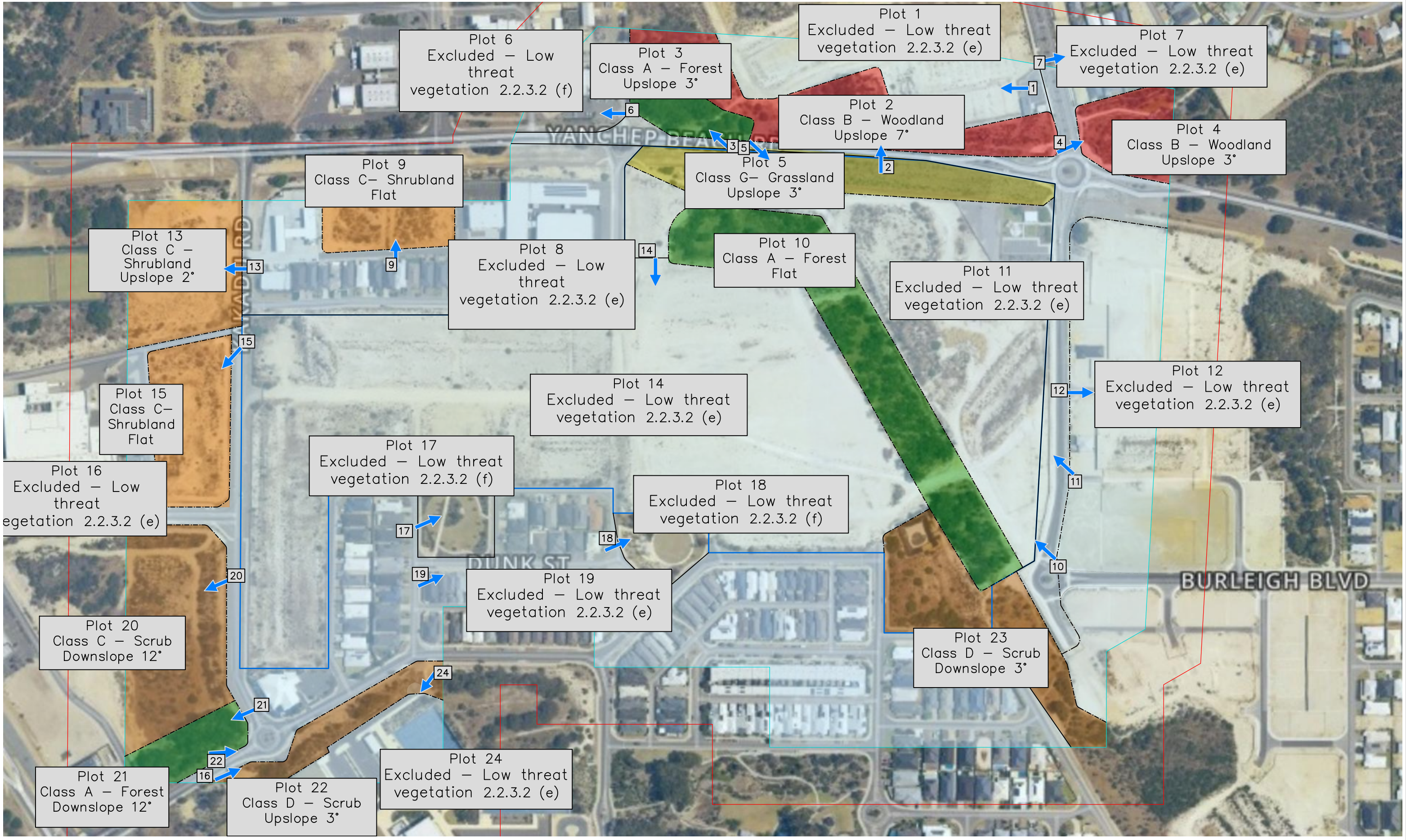
Reliance on the assessment and determination of the Bushfire Attack Level contained in this report should not extend beyond a period of 12 months from the Assessment date. If the assessment was completed more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.

Site Assessment & Site Plans

(Attached as page 2 of this report)

The assessment of this site / development was undertaken on the above-mentioned date by an Accredited BPAD Practitioner for determining the Bushfire Attack Level in accordance with AS 3959 - 2009 Simplified Procedure (Method 1).

Entire Empire Pty Ltd | ABN: 63 468 728 651 | www.entirefire.com.au | admin@entireempire.com.au | (08) 9498 0056 | PO Box 4439 Harrisdale WA 6112



ENTIRE FIRE MANAGEMENT

Entire Empire Pty Ltd
ABN: 63 468 728 651
Office: (08) 9498 0056
Address: 6 Potts Road
Forrestdale Business Park
Forrestdale WA 6112

Project: Yindowie – Yanchep

Title: Vegetation Classification

Size	Scale	Sheet	Rev
A3	1:3000	2–2824	0

Name: Gavin Fancote

Date: 20 Mar 2020

Legend

- Subject Property
- 150m Exclusion Zone
- 100m Exclusion Zone
- Photo Location
- Vegetation Plot Boundary
- Class A – Forest
- Class B – Woodland
- Class C – Shrubland
- Class D – Scrub
- Class G – Grassland
- Excluded c2.2.3.2(f)

Notes

0 40 80 Meters

Entire Empire Pty Ltd
ABN: 63 468 728 651
Office: (08) 9498 0056
Address: 6 Potts Road
Forrestdale Business Park
Forrestdale WA 6112

Project Yindowie – Yanchep

Title BAL Contour Assessment

Size	Scale	Sheet	Rev
A3	1:3000	BAL C 2–2824	0

Name Gavin Fancote

Date 20 Mar 2020

Legend

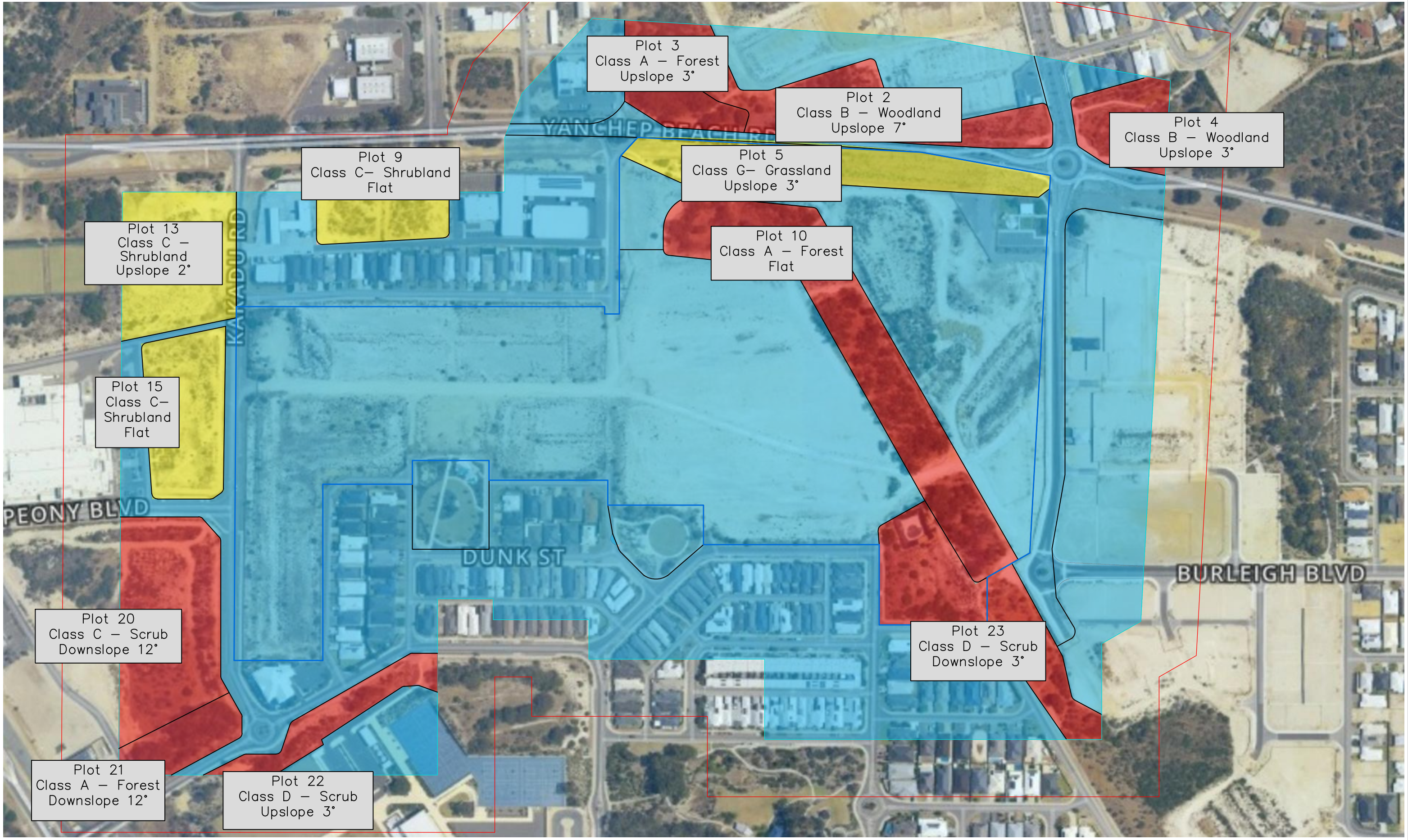
- Property Boundary
- Proposed Building
- 100m Exclusion Zone
- 150m Assessment area
- Vegetation Plot Boundary

Indicative Bushfire Attack Levels:

- BAL–LOW
- BAL–12.5
- BAL–19
- BAL–29
- BAL–40
- BAL–FZ

Notes

0 120 240 Meters



ENTIRE FIRE MANAGEMENT

Entire Empire Pty Ltd
ABN: 63 468 728 651
Office: (08) 9498 0056
Address: 6 Potts Road
Forrestdale Business Park
Forrestdale WA 6112

Project Yindowie – Yanchep

Title Bushfire Hazard Level

Size	Scale	Sheet	Rev
A3	1:3000	BHL 2–2824	0

Name Gavin Fancote

Date 20 Mar 2020

Legend

- Subject Development
- Low Hazard Level
- Moderate Hazard Level
- Extreme Hazard Level

Notes

0 120 240 Meters

Vegetation Classification

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	1	Plot no:	1
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	2	Plot no:	2
Vegetation Classification or Exclusion Clause			
Class B - Woodland			
Description			
Trees averaging height 10m-12m with 10%-30% foliage cover dominated by eucalypts with a prominent grassy understorey, includes small shrubs.			

Photo ID:	3	Plot no:	3
Vegetation Classification or Exclusion Clause			
Class A - Forrest			
Description			
Trees averaging height 10m-12m; 30%-70% foliage cover Typically dominated by eucalypts. May include low trees or shrubs. Dense vegetation within Plot			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	4	**Plot no:**	4
Vegetation Classification or Exclusion Clause			
Class B - Woodland			
Description			
Trees averaging height 10m-15m wit 10%-30% foliage cover dominated by eucalypts with a prominent grassy understorey. Low Shrubs surrounding set in a small reserve.			

Photo ID:	5	**Plot no:**	5
Vegetation Classification or Exclusion Clause			
Class G - Grassland			
Description			
Low lying sparse vegetation including situations with shrubs and Isolated trees, if the overstorey foliage cover is less than 10%.			

Photo ID:	6	**Plot no:**	6
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	7	**Plot no:**	7
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings.			

Photo ID:	8	**Plot no:**	8
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings.			

Photo ID:	9	**Plot no:**	9
Vegetation Classification or Exclusion Clause			
Class C - Shrubland			
Description			
Found in area affected by poor quality soil or shallow soils. Shrubs average height 1m not greater than 2m high.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	10	**Plot no:**	10
Vegetation Classification or Exclusion Clause			
Class A - Forrest			
Description			
Trees averaging height 10m-12m; 30%-70% foliage cover Typically dominated by eucalypts. May include low trees or shrubs. Dense vegetation within Plot.			

Photo ID:	11	**Plot no:**	11
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops. Plot is included within the development.			

Photo ID:	12	**Plot no:**	12
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	13	**Plot no:**	13
Vegetation Classification or Exclusion Clause			
Class C - Shrubland			
Description			
Found in area affected by poor quality soil or shallow soils. Shrubs 1m-2m high.			

Photo ID:	14	**Plot no:**	14
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops. Plot is included within the development.			

Photo ID:	15	**Plot no:**	15
Vegetation Classification or Exclusion Clause			
Class C - Shrubland			
Description			
Found in area affected by poor quality soil or shallow soils. Shrubs averaging height of 1m not greater 2m high.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	16	**Plot no:**	16
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings and rocky outcrops.			

Photo ID:	17	**Plot no:**	17
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (f)Regarded as Low threat vegetation : managed grasslands in a minimum fuel condition. Including Public reserves, parklands, nature strips and windbreaks			

Photo ID:	18	**Plot no:**	18
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (f)Regarded as Low threat vegetation : managed grasslands in a minimum fuel condition. Including Public reserves, parklands, nature strips and windbreaks			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	19	**Plot no:**	19
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings.			

Photo ID:	20	**Plot no:**	20
Vegetation Classification or Exclusion Clause			
Class D - Scrub			
Description			
Found in areas with poor soil fertility. Shrubs >2m high up to 6m			

Photo ID:	21	**Plot no:**	21
Vegetation Classification or Exclusion Clause			
Class A - Forrest			
Description			
Trees averaging height 12-15m; 30%-70% foliage cover Typically dominated by eucalypts. May include low trees or shrubs. Dense vegetation within Plot.			

Vegetation Classification (continued)

All vegetation within 100m of the site / proposed development was classified in accordance with Clause 2.2.3 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID:	22	**Plot no:**	22
Vegetation Classification or Exclusion Clause			
Class D - Scrub			
Description			
Found in areas with poor soil fertility. Shrubs >2m high up to 6m. Plot joins larger area of Scrub out of 100m radius.			

Photo ID:	23	**Plot no:**	23
Vegetation Classification or Exclusion Clause			
Class D - Scrub			
Description			
Found in areas with poor soil fertility. Shrubs >2m high up to 6m			

Photo ID:	24	**Plot no:**	24
Vegetation Classification or Exclusion Clause			
Excluded - Low Threat Vegetation			
Description			
2.2.3.2 (e) Non vegetated areas that are permanently cleared of vegetation, roads, buildings. Developed sporting complex, car parks, tennis courts, maintained ovals.			

Appendix 2: Plans and Drawings

Plans and drawings relied on to determine the Bushfire Attack Level.