



Lot 9507 Layman Road, Geographe – Newport Geographe

# STRUCTURE PLAN



Prepared for Aigle Geographe Pty Ltd

# DOCUMENT HISTORY AND STATUS

**Lot 9507 Layman Road, Geographe –  
Newport Geographe  
Structure Plan**

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Revision	Reviewer	Date Issued
15/059	LM	Dec 2017
15/059 Rev 2	LM	July 2018
15/059 Rev 3	RC	Aug 2020
15/059 Rev 4.2	FF	Oct 2021
15/059 Rev 4.3	RC	Aug 2025

**ENDORSEMENT PAGE**

This structure plan is prepared under the provisions of the City of Busselton  
Local Planning Scheme No. 21.

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

**24 SEPTEMBER 2025**

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:

**24 SEPTEMBER 2035**

# TABLE OF AMENDMENTS

Each time the Structure Plan is amended, the amendment is to be recorded in the table of amendments at the front of the Structure Plan, including the amendment type (minor or major).

Amendment No.	Summary of the Amendment	Amendment Type	Date Approved by WAPC





# TABLE OF DENSITY PLANS

*Each time a density plan is approved, the plan is to be recorded in the table of density plans at the front of the Structure Plan.*

Density Plan No.	Area of Density Plan Application	Date Endorsed by WAPC



# EXECUTIVE SUMMARY

This Structure Plan is prepared to guide the subdivision and development of a portion of Lot 9507 Layman Road, Geographe – Newport Geographe hereafter referred to as the 'structure plan area', 'subject site' or 'site'.

The subject site is located:

- within the municipality of the City of Busselton; and
- at the eastern end of the Busselton Town Site.

The subject site is vacant, consists of partially constructed canals and contains minimal amounts of low-level vegetation re-growth.

The Structure Plan accommodates development of the site for:

- 'Residential' purposes comprising a mix of low, medium and high residential densities;
- Public Open Space (POS) and drainage; and
- Access streets.

The subject site falls within the boundaries of the adopted Port Geographe Development Plan. This Structure Plan proposes to supersede the portion of the Port Geographe Development Plan covering part of the subject site. The Structure Plan will be implemented in two stages, with this Structure Plan relating to Area 1 only. Area 2 will require additional planning and will be the subject of a Structure Plan modification at a later stage, expanding the Structure Plan area.

## STRUCTURE PLAN SUMMARY

Item	Data	Structure Plan Reference (section no.)
Total area covered by the Structure Plan	37.7378 hectares	1.2
Area of each proposed Land Use Zones	22.6186 hectares	3.3
Reserves	10.6919 hectares	
• Road Reserve	4.9642 hectares*	
• Public Open Space	*includes 0.8190 hectares of drainage *includes 0.2339 hectares of non-creditable Pedestrian links	
Estimated Lot and Dwelling Yield	599 lots / 714 dwellings	3.3 Development Concept – Figure 6
Estimated Residential Density	18.92 dwellings per gross hectare	3.3
• Dwellings per gross hectare (as per Liveable Neighbourhoods)	31.57 dwellings per site hectare	
• Dwellings per site hectare (as per Liveable Neighbourhoods)		
Estimated Population	1,907 people @ 2.8 people / household in single dwellings & @ 2 people / household in apartments	3.3
Amount of Public Open Space:	4.2745 hectares or 10% Creditable POS	3.4 Table 9: POS Schedule / Figure 9
• Amount of credited Public Open Space: (as per Liveable Neighbourhoods)	0.7110 hectares (0.2555 hectares creditable)	
• Amount of restricted Public Open Space: (as per Liveable Neighbourhoods)		
Composition of Public Open Space:	2.1586 hectares (46%)*	3.4
• Neighbourhood	2.5714 hectares (54%)*	
• Local Parks	*includes drainage totalling up to 0.8190 hectares	

*Note: The details above include within the POS summary, 5,219m<sup>2</sup> of Public Open Space (POS 1 on the POS Plan) which is to the west of the Structure Plan area and contained within Stage 1 of the overall estate development, as approved under WAPC Ref. 153587. The POS calculations have also been undertaken to include the Stage 1 subdivision area, which when included provides an overall estate development area of 43.2007ha.*



# TABLE OF CONTENTS

PART ONE IMPLEMENTATION	1	2.3.1 GROUNDWATER	17	3.5 WATER MANAGEMENT	39
1 STRUCTURE PLAN AREA	2	2.3.2 SURFACE WATER	18	3.5.1 LOCAL WATER MANAGEMENT STRATEGY	39
2 OPERATION	2	2.4 BUSHFIRE HAZARD	18	3.6 MOVEMENT NETWORK	39
3 STAGING	2	2.4.1 BUSHFIRE ATTACK LEVEL ASSESSMENT	18	3.6.1 EXTERNAL ROAD NETWORK	39
4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS	2	2.5 HERITAGE	19	3.6.2 INTERNAL ROAD NETWORK	39
5 LOCAL DEVELOPMENT PLAN	4	2.5.1 ABORIGINAL	19	3.6.3 INTERSECTIONS	40
6 SCHEME AMENDMENT	4	2.5.2 EUROPEAN	19	3.6.4 WALKING AND CYCLING NETWORK	40
PART TWO EXPLANATORY INFORMATION	6	2.6 MOVEMENT NETWORKS	19	3.6.5 PUBLIC TRANSPORT ROUTES	40
1 PLANNING BACKGROUND	7	2.6.1 REGIONAL ROADS	19	3.7 DEVELOPMENT CONTEXT AREA 2 – WATERFRONT ACTIVITY NODE	44
1.1 INTRODUCTION AND PURPOSE	7	2.6.2 DISTRICT AND LOCAL ROADS	19	4 IMPLEMENTATION AND STAGING	46
1.2 LAND DESCRIPTION	7	2.6.3 WALKING AND CYCLING	19	4.1 STRUCTURE PLAN	46
1.2.1 LOCATION	7	2.6.4 PUBLIC TRANSPORT	20	4.2 MANAGEMENT PLANS	46
1.2.2 AREA AND LAND USE	9	2.7 SERVICE INFRASTRUCTURE	20	4.3 STAGING	46
1.2.3 LEGAL DESCRIPTION AND OWNERSHIP	9	2.7.1 WATER RETICULATION	20	4.4 SCHEME AMENDMENT	46
1.2.4 SUBDIVISION APPROVAL WAPC REF. 153587	9	2.7.2 SEWERAGE RETICULATION	20	4.5 AREA 2 AND WATERFRONT ACTIVITY NODE	46
1.3 PLANNING FRAMEWORK	9	2.7.3 POWER	20		
1.3.1 ZONING AND RESERVATIONS	9	2.7.4 TELECOMMUNICATIONS	21		
1.3.2 SURROUNDING LOCAL STRUCTURE PLANNING	13	2.7.5 GAS	21		
1.3.3 PLANNING STRATEGIES	13	2.8 STORMWATER MANAGEMENT	21		
1.3.4 RELEVANT PLANNING POLICIES	14	3 STRUCTURE PLAN	22		
2 SITE CONDITIONS AND CONSTRAINTS	16	3.1 DESIGN PRINCIPLES	22		
2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS	16	3.1.1 STRUCTURE PLAN RESPONSE TO ENVIRONMENTAL ASSETS AND PHYSICAL CONSTRAINTS	22		
2.1.1 VEGETATION AND FLORA	16	3.1.2 CONCEPT CHARACTERISTICS	24		
2.1.2 FAUNA	16	3.2 DEVELOPMENT CONCEPT PLAN	26		
2.2 LANDFORM AND SOILS	16	3.3 LAND USE	30		
2.2.1 LANDSCAPE AND TOPOGRAPHY	16	3.3.1 RESIDENTIAL	30		
2.2.2 SOILS	17	3.3.2 OTHER LAND USES	31		
2.2.3 ACID SULFATE SOILS	17	3.4 OPEN SPACE	32		
2.2.4 CONTAMINATION	17	3.4.1 PUBLIC OPEN SPACE	34		
2.3 GROUNDWATER AND SURFACE WATER	17	3.4.2 LANDSCAPE DESIGN	37		

## TECHNICAL APPENDICES

APPENDIX A PRE-LODGE MENT CONSULTATION
APPENDIX B ENVIRONMENTAL ASSESSMENT REPORT
APPENDIX C LOCAL WATER MANAGEMENT STRATEGY
APPENDIX D BUSHFIRE MANAGEMENT PLAN
APPENDIX E ABORIGINAL HERITAGE ADVICE
APPENDIX F ENGINEERING SERVICES REPORT
APPENDIX G TRANSPORT IMPACT ASSESSMENT
APPENDIX H LANDSCAPE STRATEGY



# PART ONE IMPLEMENTATION



## 1 STRUCTURE PLAN AREA

This Structure Plan applies to the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan Map.

## 2 OPERATION

The Structure Plan commences operation on the date it is approved by the Western Australian Planning Commission (WAPC).

This Structure Plan supersedes that portion of the Port Geographe Development Plan covered by this Structure Plan.

## 3 STAGING

For the purposes of structure planning, the subject site is divided into two areas, Area 1 and Area 2.

Area 1 (the subject of this Structure Plan) is intended to be developed for conventional or 'dry-lot' subdivision. The westernmost portion of Area 1 has recently been subdivided into 70 lots. This initial stage is included within the structure plan area in order to demonstrate integration with the balance of the site.

Area 2 is intended to represent an extension of the existing canal estate culminating in the creation of a Waterfront Activity Node or core complementing the development of Area 1. Progression of more detailed planning for this area is dependent upon the completion of investigations into canal water quality. Area 2 does not form part of this Structure Plan. Nevertheless, detail for Area 2 is provided in order to demonstrate orderly and proper planning for the entire site.

Development will be typically undertaken in a west to east direction consisting of 30-40 lot stages, depending on market conditions and demand at the time.

## 4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

- a) The Structure Plan Map defines the broad residential density ranges that apply to different areas within the Structure Plan. Lot specific residential densities, generally in accordance with the defined residential density ranges, are to be assigned in accordance with a Residential Density Code Plan determined by the WAPC.
- b) A Residential Density Code Plan is to be submitted at the time of application for subdivision approval to the WAPC, and shall indicate the residential density code applicable to each lot within the proposed subdivision. The Residential Density Code Plan shall be generally consistent with the residential density ranges identified in the Structure Plan.
- c) The Residential Density Code Plan is to include a summary of the dwelling yield of the proposed subdivision.
- d) Determination of the Residential Density Code Plan shall be undertaken at the time of determination of a subdivision application by the WAPC. An approved Residential Density Code Plan shall then form part of the Structure Plan and be used for the determination of future development applications and building permit applications.
- e) Variations to the Residential Density Code Plan will require the approval of the WAPC. A revised Residential Density Code Plan shall generally be consistent with the approved plan of subdivision issued by the WAPC. The revised Residential Density Code Plan shall be consistent with residential density ranges identified on the Structure Plan Map.
- f) A revised Residential Density Code Plan, consistent with clause (e) above will replace, wholly or partially, the previously approved Residential Density Code Plan, and shall form part of the Structure Plan as outlined in clause (d) above.

- g) A Residential Density Code Plan is not required if the WAPC considers that subdivision is for one or more of the following:
- i. the amalgamation of lots;
  - ii. consideration of land for 'super lot' purposes to facilitate land assembly for future development;
  - iii. the purposes of facilitating the provision of access, services or infrastructure; or
  - iv. land which by virtue of its zoning or reservation under the Structure Plan cannot be developed for residential purposes.
- h) The residential density code ranges are:
- i. R15 – R20
  - ii. R25 – R40
  - iii. R40 – R60
  - iv. R80 – R100
- i) Where density code ranges are depicted on the Structure Plan Map, the designation of R-Codes shall be in accordance with the criteria outlined below:
- i. R15 – R20 – generally adjacent to existing development and comprising part of existing approved subdivision (stage 1), to provide a transition from existing low-density development to new low-medium density development. The key criteria to accommodate similar residential density to existing development with resultant similar dwelling types.
  - ii. R25 – R40 – will provide the main density code range to accommodate a variety of traditional sized lots. Accommodate appropriate subdivision design and a range of opportunities for future homeowners by incorporating residential densities which offer flexibility for traditional homes which are likely to be built by project home builders.
  - iii. R40 – R60 – to provide for rear access single and grouped dwellings adjacent to areas of amenity including POS and the Waterfront Activity Node based on attached, semi-detached and attached housing (terrace).
  - iv. R80 – R100 – to provide for apartments (multiple dwellings) on suitable development sites adjacent to the Waterfront Activity Node. The applicable density code to be based on desired development outcomes relating to plot ratio and height specified by the Residential Design Codes.
- j) Land use permissibility within the Structure Plan area shall accord with the zoning table of the City of Busselton Local Planning Scheme No. 21 (as amended).
- k) Public Open Space is to be provided in accordance with the Structure Plan Map, unless otherwise determined.
- l) This Structure Plan is supported by a Bushfire Management Plan (BMP), Bushfire Management Plan – Newport Geographe Structure Plan (15 December 2017) prepared by Strategen Environmental. Any land falling within 100 metres of a bushfire hazard identified in the BMP is designated as a Bushfire Prone Area for the purpose of the Building Code of Australia.
- m) Notifications on Title
- The Council shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate of Title for lots with a Bushfire Attacked Level (BAL) rating of 12.5 or higher to state as follows:
- That a lot with a bushfire attack level (BAL) rating of 12.5 or higher is subject to a *Bushfire Management Plan*.
- The Council shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificates of Title for lots within a Vulnerable Coast Area to state as follows:

- Vulnerable Coastal Area - this lot is located in an area likely to be subject to coastal erosion and/or inundation over the next 100 years.

n) Management plans

The Council shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval to respond to the following as identified by the Structure Plan:

- A mosquito and midge management plan;
  - Urban Water Management Plan which addresses the control of potential erosion, nutrient, and/or sedimentation impacts on nearby artificial waterbodies and/or canals;
  - Acid Sulfate Soils Management Plan (if required); and
  - Landscape Plan.
- o) Environmental landscaping requirements within the Layman Road reserve area will be necessary at the subdivision stage for protection of waterfowl habitat within the adjoining conservation reserve area. Measures to avoid predation (suitable fencing), the location of shared paths and pedestrian access as well as suitable vegetation planting should be approved by the local government consistent with each stage of development with advice from DBCA.
- p) The land being filled, stabilised, drained and/or graded as required to ensure all lots can accommodate their intended development, and;
- A minimum finished floor level for all buildings of 3.0metres AHD, without the need to substantially rework or otherwise fill the lot;
  - All revetments, roads, bunds, and structures necessary to provide flood and inundation relief, are suitably engineered and implemented to maintain adequate defence against future inundation of the proposed lots in accordance with the relevant Local Water Management Strategy;
  - The extension of existing roads to service new lots are suitably designed such that suitable vehicular access to each new lot can be provided;

- The finished ground levels of new lots at the boundaries of existing lots which adjoin or abut the structure plan coordinate or are retained/benched to support the new development. In this regard the City may require a local development plan to address the urban interface issues as a condition of subdivision of these lots.

- q) Prior to subdivision approval for the applicable stage, consideration shall be given to the construction of roundabouts at the intersections with Layman Road.

## 5 LOCAL DEVELOPMENT PLAN

Local Development Plan(s) are to be prepared for lots with one or more of the following attributes:

- smaller than 260m<sup>2</sup>;
- rear vehicle access;
- having the potential for grouped and/or multiple dwellings;
- with frontages of less than 12 metres;
- abutting Public Open Space; and
- with a bushfire attack level of 12.5 or greater.

## 6 SCHEME AMENDMENT

The City of Busselton is to resolve to prepare or adopt an amendment to Local Planning Scheme No. 21 to modify the density code for the Stage 1 subdivision area south of the road connection from Navigation Way (WAPC Ref. 153587) to R30.

The City of Busselton is to resolve to prepare or adopt Amendment No. 28 to zone the Structure Plan area 'Urban Development'. The City of Busselton is to resolve to prepare or adopt an amendment to Local Planning Scheme No. 21 to introduce Additional Site and Development Requirements to:

- Specify a minimum finished floor level for all buildings of 3.0 metres AHD



## NEWPORT GEOGRAPHE STRUCTURE PLAN

# PART TWO

# EXPLANATORY INFORMATION



# 1 PLANNING BACKGROUND

## 1.1 INTRODUCTION AND PURPOSE

This Structure Plan has been prepared on behalf of Aigle Royal Developments and covers the portion of Lot 9507 Layman Road in Geographe identified as the 'Structure Plan Area'. The subject site is currently being developed and marketed as 'Newport Geographe'.

The Structure Plan will accommodate the future subdivision and development of the site for residential purposes, including Public Open Space and Access streets.

The Structure Plan has been prepared to address the requirements of the City of Busselton Local Planning Scheme No. 21 and the Planning and Development (Local Planning Schemes) Regulations 2015. The Structure Plan and report have been prepared in accordance with the WAPC's Structure Plan Framework August 2015. The Structure Plan will guide future subdivision and development of the site with the determining authorities having due regard for it in the assessment of development and subdivision applications.

This Structure Plan and concurrent Scheme Amendment will replace the existing approved town planning framework for the site consisting of 'Residential' zoning and applicable density codes under Local Planning Scheme No. 21 and the Port Geographe Development Plan. A contemporary urban design solution is provided which removes the extent of canal and lakes as could be developed under the existing adopted Development Plan. The Structure Plan is consistent with the current statutory planning framework.

The following technical documentation has been prepared in support of this town planning report:

- Environmental Assessment Report (refer **Appendix B**);
- Local Water Management Strategy (refer **Appendix C**);
- Bushfire Management Plan (refer **Appendix D**);
- Aboriginal Heritage Advice (refer **Appendix E**);
- Engineering Servicing Report (refer **Appendix F**);
- Transport Impact Assessment (**Appendix G**); and
- Landscape Strategy (Refer **Appendix H**).

The Project Team, responsible for preparing the information contained within this report, (in consultation with the City of Busselton, Department of Planning, Lands and Heritage, and relevant Service Authorities) include those detailed in **Table 1**.

**TABLE 1: PROJECT TEAM AND RESPONSIBILITIES**

Project Role	Consultant
Town Planning and Urban Design	Taylor Burrell Barnett
Civil Engineering	TABEC
Environment and Hydrology	360 Environmental and JDA Hydrology
Bush Fire Hazard Assessment and Management	Strategen Environmental
Landscape	Emerge Associates
Place Making	TPG + Place Match
Waterfront Activity Node	Hames Sharley
Traffic/Transport Assessment	Shawmac
Aboriginal Heritage Advice	Brad Goode & Associates

## 1.2 LAND DESCRIPTION

### 1.2.1 LOCATION

The subject site is located within the suburb of Geographe, situated within the City of Busselton (**Figure 1**).

The subject site is located:

- north and west of the Vasse-Wonnerup Estuary and bound by Layman Road;
- south-west of developed residential land and various commercial land uses within the Port Geographe Marina development, including constructed canals;
- south of residential development and Navigation Way;
- approximately 725 metres south of Geographe Bay; and
- approximately 3.5 km east of the Busselton Town Centre.





Figure 1 - Location/Context



1.2.2 AREA AND LAND USE

The subject site consists of one lot, with a multiple use wetland spanning across the entire site. The site is generally cleared with areas of low level vegetation re-growth that has occurred since liquidation of the former landowner. The site is cleared and consists of existing shallow water bodies which fill during rain periods as a result of the extraction of fill used for the development of the Port Geographe development. Stage 1 is currently undergoing development and has been filled. A minor drainage line connecting Navigation Way to Layman Road runs through the western and southern areas of the subject site (refer **Figure 2**).

1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The property details and ownership of the subject site are detailed in **Table 2**.

TABLE 2: PROPERTY DETAILS

Lot No.	Volume	Folio	Deposited Plan	Owner	Area
9507	2715	279	59251	Aigle Geographe Pty Ltd	59.09 ha

1.2.4 SUBDIVISION APPROVAL WAPC REF. 153587

The Stage 1 subdivision area is located outside of the Structure Plan area to the west, though forms part of the Newport Geographe Estate. Subdivision of Stage 1 has commenced as per WAPC approval (reference 153587), and once complete will create 70 lots and 5,219m<sup>2</sup> of POS.

1.3 PLANNING FRAMEWORK

1.3.1 ZONING AND RESERVATIONS

1.3.1.1 CITY OF BUSSELTON LOCAL PLANNING SCHEME NO. 21

The subject site comprises land zoned Residential with R15, R20, R30, and R20/R40 density codes; and land reserved Recreational and Public Purposes under the City of Busselton Local Planning Scheme No. 21 (LPS 21) (refer **Figure 3**). Refer **Table 3** for area and zoning summary. The entire site is included in the ‘Port Geographe Development Area’, a Special Control Area within which future subdivision and development of the land is coordinated by the Port Geographe Development Plan.

The recent LPS 21 Amendment No. 23 zoned portions of the subject site identified as ‘Stage 1’, to remove the unzoned portion of road layout and replaced it with a Residential zoning and applicable density code consistent with surrounding land.

TABLE 3: LOT AREA AND ZONING DETAILS

LOT	AREA (HA)	STRUCTURE PLAN AREA (HA)	RESIDENTIAL AREA (HA)	PUBLIC PURPOSES AREA (HA)	RECREATION AREA (HA)
9507	59.09	37.7378	23.0055	0.2016	12.8067

Note: The Recreation Area above includes 5,219m<sup>2</sup> of Public Open Space (POS 1 on the POS Plan) which is to the west of the Structure Plan area and contained within Stage 1 of the overall estate development, as approved under WAPC Ref. 153587. The POS calculations have also been undertaken to include the Stage 1 subdivision area, which when included provides an overall estate development area of 43.2010ha.





Figure 2 - Subject Site



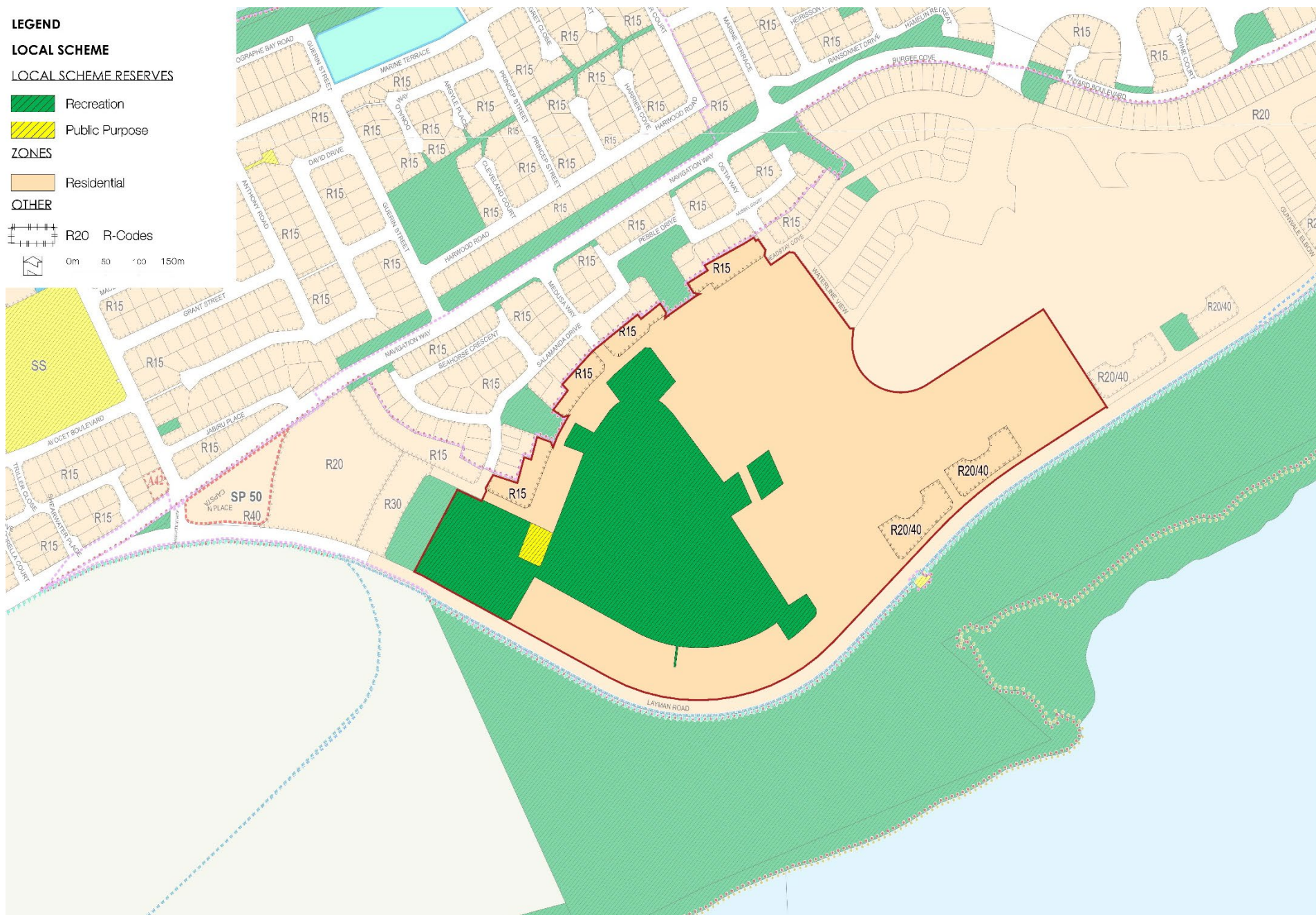


Figure 3 - City of Busselton Local Planning Scheme No. 21



### 1.3.1.2 PLANNING AND DEVELOPMENT (LOCAL PLANNING SCHEMES) REGULATIONS 2015

The assessment and approval of this Structure Plan will be considered under the Planning and Development (Local Planning Schemes) Regulations 2015 as detailed under Schedule 2 Part 4.

### 1.3.1.3 CITY OF BUSSELTON DEVELOPER CONTRIBUTIONS

The subject site is contained within Development Contribution Area 1 – Community Infrastructure (DCA 1) as contained within Schedule 15 of LPS 21. DCA 1 relates to municipal-wide community infrastructure.

The subject site falls within the Port Geographe Developer Contributions and Staging Plan – Applying to the Port Geographe Development Area as contained within Clause 6.9 of LPS 21. This was adopted by the City of Busselton on 17 March 2009.

Whilst acknowledging the requirements of DCA 1, further review and discussion is required with the City of Busselton regarding the implementation of the Port Geographe Developer Contributions and Staging Plan in light of design modifications which, most noticeably, remove key infrastructure items such as the freshwater lake. In addition, the site remains under single ownership with the landowner having entered into an Interim Development Deed with the City of Busselton and the Minister for Transport regarding the developer's responsibility associated with Developer Contributions. In this regard, the Interim Development Deed clearly identifies the developer's per lot contribution amount. The Interim Development Deed also precludes the Developer from its former responsibilities regarding the provision of land for the community purpose site and two active public open space ovals as contained within the Port Geographe Development Plan. The Developer is also precluded from the need to undertake or contribute to the construction of extensions and or upgrades of certain existing roads surrounding the subject site and maintenance of the existing pedestrian footbridge at Port Geographe.

The developer acknowledges these existing arrangements in addition to its responsibility to provide for fencing on top of the existing bund adjacent to Layman Road to be provided when nearby stages of subdivision are constructed.

### 1.3.1.4 EXISTING PORT GEOGRAPHE DEVELOPMENT PLAN

The existing Port Geographe Development Plan was adopted by Council and the WAPC in September 2005. The Port Geographe Development Plan covers the subject site as well as land to the north, which has since been developed.

The approved Port Geographe Development Plan outlines:

- the continuation of the canal style development which is established to the north of the subject site;
- predominantly R20 residential coding with the potential for medium density development adjacent to Layman Road;
- an ornamental lake in the western portion of the subject site; and
- active and passive Public Open Space areas.

The subject site received subdivision approval from the WAPC in April 2009 in accordance with the approved Port Geographe Development Plan.

Earthworks commenced on the site in the early 2000's and as a result, the site was cleared of native vegetation and excavated to create partially complete canals on the eastern and central portions of the site. The developer subsequently went into liquidation and as a result the site has been left undeveloped. Aigle Royal has since purchased the site with an extensive design review having been undertaken resulting in the need to update / replace the Port Geographe Development Plan to meet the new development vision through this Structure Plan.

Due to the changing site conditions this Structure Plan has been prepared to vary the previous design and will supersede the Port Geographe Development Plan.

Clause 6.9.3 of LPS 21 states that any modification to the Port Geographe Development Plan shall be subject to the provisions of Clause 7.3 relating to Development Guide Plans, as well as contain at least the following elements:

- i) The requirement for public open space for the development south of Layman Road in accordance with the Port Geographe Development Plan endorsed at the Gazetted date of the Scheme.

- ii) Provision of a high level of direct public access to waterways/canals.
- iii) A general presumption against residential lots backing onto conservation/foreshore reserves.

Whilst this Structure Plan will be adopted as a new Structure Plan under the Planning and Development (Local Planning Schemes) Regulations 2015 and LPS 21, the Structure Plan responds to these requirements outlined above, as detailed in this Structure Plan report.

## 1.3.2 SURROUNDING LOCAL STRUCTURE PLANNING

The majority of land north of the subject site is established and well advanced, with older development located between the subject site and the coastline and newer development which has been undertaken in accordance with the Port Geographe Development Plan. The Vasse-Wonnerup Estuary is located on the southern side of the subject site preventing any development further south.

## 1.3.3 PLANNING STRATEGIES

### 1.3.3.1 SOUTH WEST REGIONAL PLANNING AND INFRASTRUCTURE FRAMEWORK (2015)

The South West Regional Planning and Infrastructure Framework (Framework) provides an overall strategic context for land-use planning in the South West. The Framework identifies that the population of the South West region is expected to grow from 165,985 in 2011 to nearly 210,000 people in 2026, requiring supporting accommodation and key infrastructure to cater for the predicted growth. Busselton in particular has been recognised as having a 'high' current growth rate and 'high' estimated growth potential. The Framework suggests the key social, economic and environmental drivers of Busselton will be diversified industrial commercial sectors such as creative/innovative and leisure industries.

### 1.3.3.2 DRAFT LEEUWIN NATURALISTE SUB-REGIONAL PLANNING STRATEGY (2017)

The draft Leeuwin Naturaliste Sub-Regional Planning Strategy is an overarching planning document that outlines the WAPC's approach to future planning and development within the City of Busselton and the Shire of Augusta-Margaret River. The Strategy is intended to be more detailed than the South West Regional Planning and Infrastructure Framework.

The Strategy identifies that the City of Busselton's population is approximately 36,335 as at June 2015, and is expected to grow by a further 7,000 to 8,000 people by 2026, driving demand for more residential and industrial land in the Busselton-Vasse and Dunsborough areas.

The Strategy recognises that there is opportunity for urban infill and redevelopment within the Busselton Regional Centre, including Geographe, and there is an opportunity to review and improve greenfield structure plans to reflect current best practice.

The subject site is identified as 'Urban' in the Strategy.

### 1.3.3.3 BUSSELTON URBAN GROWTH STRATEGY (1999) AND STRATEGY PLAN (2006)

The Busselton Urban Growth Strategy (1999) identifies the predicted annual growth rate of 5% within the City of Busselton. The Strategy identifies areas most suitable for urban growth to satisfy the long term residential demand for Busselton based on providing a suitable and sustainable urban form.

The Strategy provides limited guidance on the future of the subject site, recognising it as an existing urban area.

The Urban Growth Strategy and Plan will be superseded by the City of Busselton Local Planning Strategy once it has been finalised.

#### 1.3.3.4 CITY OF BUSSELTON DRAFT LOCAL PLANNING STRATEGY

The City of Busselton's draft Local Planning Strategy (LPS) was endorsed by Council on 14 September 2016 and is currently with the WAPC for consideration. The draft LPS sets out the long-term planning direction for the district of the City of Busselton and will consolidate the existing local planning strategies and provide the overarching strategic rationale for decisions relating to planning and development.

The draft LPS provides limited guidance on the future of the subject site, simply recognising it as an existing urban zone that will continue to be progressively developed principally for a mixture of residential and recreational purposes.

The Structure Plan meets the requirements of the Local Planning Strategy, providing a framework to develop the site within an urban zone.

#### 1.3.3.5 FUTURE BUSSELTON 2050

In association with the draft LPS, the City of Busselton's Future Busselton 2050 document identifies four growth scenarios in the City of Busselton to occur by 2050. The document was used as a consultation tool to inform the draft LPS. A preference was expressed through the consultation process for 'Scenario 3: Focused Growth', which the draft LPS reflects most closely.

#### 1.3.3.6 CITY OF BUSSELTON LOCAL ENVIRONMENTAL PLANNING STRATEGY (2011)

The City of Busselton's Local Environmental Planning Strategy (LEPS) guides development and environmental protection, as well as provide input and context for future development of the City's draft LPS.

The subject site is included within the Urban Boundary, suggesting urban development is appropriate in this location.

The LEPS identifies the subject site as having areas of unreserved poorly represented native vegetation. The Environmental Assessment Report has assessed the vegetation on the subject site, concluding that the subject site has been largely cleared with only sparse areas of exotic weeds remaining (refer **Appendix B – Environmental Assessment Report**).

The LEPS also designates the subject site as being included within the 1 in 100 Year Flood Boundary, which has been addressed in the Local Water Management Strategy, as discussed in **Section 3.6**.

#### 1.3.3.7 CITY OF BUSSELTON LOCAL TOURISM PLANNING STRATEGY

The City of Busselton Local Tourism Planning Strategy focuses on identifying locations and sites that are important for sustainable tourism industry growth within the City, with the aim of informing the Draft Local Planning Strategy and new Local Planning Scheme.

Port Geographe is identified as a Strategic Tourism Precinct, with the recommendation to apply special provisions to such land to ensure tourist accommodation development is permissible and generally support proposals to rezone land to support tourism development, where it is consistent with the broad framework.

### 1.3.4 RELEVANT PLANNING POLICIES

#### 1.3.4.1 STATE PLANNING POLICIES

##### OPERATIONAL POLICY – LIVEABLE NEIGHBOURHOODS

Liveable Neighbourhoods (LN) is the WAPC's operational policy guiding the design and approval of structure plans for greenfield sites. The objective of LN is the delivery of new developments that provide high quality living, working and recreational environments, thereby contributing to the successful implementation of the State Planning Strategy and State Sustainability Strategy. The Structure Plan meets the aspirational requirements of LN, with a particular focus on the following key aims:

- an urban structure based on interconnected, safe and walkable neighbourhoods;
- creating a sense of community, identity and a sense of place;
- providing a variety of lot sizes and housing types to cater for the diverse housing needs of the community at a density that can support local services and public transport; and
- maximising land efficiency wherever possible.

## SPP 2.6 STATE COASTAL PLANNING POLICY

State Planning Policy 2.6 – State Coast Planning Policy (SPP 2.6) provides guidance for decision-making within the coastal zone, including managing development and land use change; establishment of foreshore reserves; and to protect, conserve and enhance coastal values.

SPP 2.6 recommends new infill developments should consider coastal hazard risk management and adaption measures to reduce coastal hazard risks to acceptable levels. SPP 2.6 specifies allowance for storm surge inundation on coasts. The maximum extent of inundation should be calculated as the sum of allowance for the current risk of storm surge inundation and predicted sea level rise.

The Local Water Management Strategy (LWMS) prepared in support of this Structure Plan includes a report on *Interaction of Coastal and Catchment Floods for Determining Port Geographe Finished Floor Levels* and addresses the requirements of SPP 2.6, as discussed in **Section 2.3** and included in **Appendix C**.

## DEVELOPMENT CONTROL POLICY 1.8 – CANAL ESTATES AND ARTIFICIAL WATERWAY DEVELOPMENT

Development Control Policy 1.8 (DCP 1.8) sets out the requirements of the WAPC for assessment of canal estate proposals.

DCP 1.8 is not applicable to the development on the Structure Plan area as no canals or canal extensions are identified. Aigle Royal has entered into a deed of agreement with the City and the Minister for Transport which stipulates the requirement to prepare an Artificial Waterways Management Plan only where subdivision approval for a 'canal extension' is granted. This will be a requirement when the Structure Plan is modified at a later stage to expand the Structure Plan site to include the land within Area 2 which will incorporate canals.

Agreement to manage water quality issues within the LWMS was provided by the Department of Water and Environmental Regulation as part of the liaison undertaken for this project.

In an effort to assist the City and the Department of Transport, Aigle Royal currently contributes towards ongoing water quality monitoring of the existing marina and is committed to canal water quality management.

## SPP 3.7 PLANNING IN BUSHFIRE PRONE AREAS – BUSHFIRE POLICY FRAMEWORK

State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) forms the foundation for land use planning to address bushfire risk management in Western Australia. SPP 3.7 is used to inform and guide decision makers, referral authorities and proponents on achieving acceptable fire protection outcomes on planning proposals in bushfire prone areas.

In support of SPP 3.7 and pursuant to 'State Planning Policy 3.4 – Natural Hazards and Disasters', the Guidelines for Planning in Bushfire Prone Areas sets out a range of matters that need to be addressed at various stages of the planning process, to provide an appropriate level of protection to life and property from bushfires, and avoid inappropriately located or designed land use, subdivision and development on land where a bushfire risk is identified.

Bushfire considerations form an integral part of the Structure Plan design, as outlined in **Section 2.4** of this report and the Bush Fire Hazard Assessment and Management Plan attached at **Appendix D**.

## 2 SITE CONDITIONS AND CONSTRAINTS

### 2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS

An Environmental Assessment Report (EAR) has been prepared by 360 Environmental in support of the Structure Plan (refer **Appendix B**). The objective of the EAR is to describe the relevant environmental characteristics of the site and present management and mitigation strategies in response to potential environmental impacts. The key environmental influences relating to the subdivision and development of the subject site include:

- Groundwater quality and management;
- Acid Sulfate Soils; and
- Fauna management.

#### 2.1.1 VEGETATION AND FLORA

The subject site has been largely cleared, with scattered patches of understory remaining. The site is predominantly covered in Samphire (*Tecticornia* spp.) and a mix of exotic weeds. Scattered native species were identified within the site that included low lying native species, such as *Ficinia nodosa* and juvenile Peppermint trees (*Agonis flexuosa*).

A Department of Parks and Wildlife NatureMap Flora Search was undertaken within a 2km buffer of the site and a Department of Energy and Environment (DotEE) Protected Matters Search Tool (PMST) was undertaken within a 1 km buffer of the subject site. The NatureMap report identified two Priority flora species and no Threatened flora species occurring within a 2km radius of the subject site. The PMST identified seven Threatened flora species as occurring within a 1 km radius of the site.

The site is considered highly unlikely to contain any Priority or Threatened Ecological Communities due to its highly disturbed nature and lack of remnant vegetation.

No conservation significant flora species are considered likely to occur within the subject site due to the highly disturbed nature of the site and lack of a suitable habitat.

#### 2.1.2 FAUNA

A DPaW NatureMap Fauna Search was undertaken within a 2km buffer of the site and a DotEE PMST was undertaken within a 1km buffer of the site. The report results identified several species occurring within these buffers.

Based on ecological requirements, known distributions and the type and quality of fauna habitats, the conservation significant fauna species likely to occur within the site are waterbirds and waders. These species would also inhabit the extensive Vasse-Wonnerup Estuary south of the site.

The remainder of the site has limited or no habitat value for fauna species.

It is considered unlikely that developing the site will impact on the population of any conservation significant fauna species. The waterbodies within the site are also artificial and not considered a natural habitat for fauna species.

Filling of the artificial water bodies will be undertaken in a staged approach to allow the birds to move on to nearby habitat.

### 2.2 LANDFORM AND SOILS

#### 2.2.1 LANDSCAPE AND TOPOGRAPHY

The entire Port Geographe site was historically mined for sand, resulting in the topography being significantly disturbed (prior to the earthworks associated with the proposed development) and therefore, pre-disturbance surface levels are unavailable.

The elevation varies across the site between approximately 2m AHD at the base of the excavated canals to approximately 5.8m AHD in the eastern corner of the site.



### 2.2.2 SOILS

The Department of Agriculture and Food Western Australia (DAFWA) dataset indicates that the site falls within the Vasse Wonnerup wet flats Phase and Vasse Wonnerup very wet saline flats Phase systems.

The Vasse Wonnerup wet flats Phase 2 soils are categorised by poorly drained flats around the edge of the Vasse Estuary and dark calcareous and mixed estuarine deposits. The Vasse Wonnerup very wet saline flats Phase 2 soils are located in Vasse, Wonnerup and Broadwater Estuaries and categorised as being low lying depressions which are often underwater in winter and saline in summer.

### 2.2.3 ACID SULFATE SOILS

The WAPC Acid Sulfate Soils (ASS) risk mapping shows the entire site as having “*high to medium risk of acid sulphate soils within 3 m of the natural soil surface*”.

Dewatering, soil disturbance, compaction or lateral displacement in areas of ASS will be avoided where possible. To construct future subdivision, fill will be required to fill areas which have previously been excavated and achieve the required separation from ground water levels to reduce flooding risk.

If ASS is to be disrupted on the subject land, a suitably qualified environmental consultant will be engaged to conduct an investigation of the area and if necessary, prepare an ASS Management Plan. The ASS Management Plan will detail the actions to minimise and mitigate potential adverse environmental effects during the subdivision works.

### 2.2.4 CONTAMINATION

A search of the Department of Environment Regulation (DER) Contaminated Sites Database did not identify any contaminated sites present within the subject site, and no obvious potentially contaminating industries, activities or land uses appear to have taken place within the site.

## 2.3 GROUNDWATER AND SURFACE WATER

Groundwater and surface water levels have been considered in the Local Water Management Strategy prepared by 360 Environmental, which includes a report by JDA on The Interaction of Coastal and Catchment Floods for Determining Port Geographe Finished Floor Levels (refer **Appendix C - LWMS**).

### 2.3.1 GROUNDWATER

As a result of the previous construction on the subject site, the hydrology of the area has been substantially altered. Groundwater levels across the site range between -0.09mAHD and 0.94mAHD, varying approximately 1.3m above and below ground surface level. The site's close proximity to the coast results in the expectation that groundwater levels will be largely influenced by and be of similar levels to sea levels.

#### 2.3.1.1 FLOWS AND LEVELS

Groundwater monitoring was undertaken between 2006 and 2008, and again between 2016 and 2017 which identified the groundwater flow direction is towards the marina.

#### 2.3.1.2 QUALITY

A summary of the groundwater quality monitoring results is included in **Appendix C – LWMS**. pH Levels were typically recorded below the guideline lower limit, though these values are reflective of groundwater and are not considered to be an issue for the receiving environment.

Nutrient levels were found to be relatively high across the site. The area adjacent to the subject site has experienced severe nutrient problems for many years as a result of urbanisation and intensive agriculture leading to high nutrient load discharges to the Vasse-Wonnerup System. The water quality objectives for recovery of the system are to reduce nutrients, but these targets have not yet been met.

The development will be designed to minimise impacts on water quality in the Vasse-Wonnerup Estuary. This will be done through effective nutrient treatment management measures.

The Structure Plan does not alter the existing arrangements to protect the estuary and the movement layout has been designed to discourage intrusion into this area.

### 2.3.2 SURFACE WATER

Surface water exists within the subject site in the form of the previously excavated canals. There is also a RAMSAR Wetland system named as the Vasse-Wonnerup Estuary immediately to the south.

It is noted that a number of catchments to the north of the subject site discharge stormwater into the excavations contained within the site. It has been agreed with DWER and the City that it is not the responsibility of this development to manage any water quality issues which may arise from development outside the site.

#### 2.3.2.1 FLOOD LEVELS

The subject site is subject to storm surge, flooding from the Vasse-Wonnerup Estuary as well as sea level rise.

The potential inundation extent from 0.2% AEP (equivalent to the 500-year ARI) translated to inundation levels of 1.67m AHD (current), 2.14 mAHd (to 2070) and 2.57mAHd (to 2110) for Port Geographe.

Modelling of peak water levels of around 1.43mAHd to 1.46mAHd for the Vasse-Wonnerup Estuary has shown very little variation in peak waters in the estuary. In accordance with SPP 2.6, allowance for storm surge inundation on coasts, the maximum extent of inundation, should be calculated as the sum of allowance for the current risk of storm surge inundation and predicted sea level rise. The combined impact of tidal floods and estuarine floods has been assessed, and for current and 2070 sea level conditions, 1% AEP peak water levels of 1.45mAHd and 1.85mAHd have been derived for the Vasse-Wonnerup Estuary.

The proposed minimum residential finished floor level is 2.5mAHd which JDA has advised is sufficient to address storm surge and flooding of the Vasse-Wonnerup Estuary whilst taking into account sea level rise.

## 2.4 BUSHFIRE HAZARD

Portions of the subject site are designated as bushfire prone on the WA Map of Bush Fire Prone Areas (DFES 2017). A Bushfire Management Plan (BMP) has been prepared by Strategen Environmental in support of the Structure Plan (refer **Appendix D**). The BMP is a strategic level plan which identifies the bushfire protection measures to be applied to development on the subject site to accommodate compliance with:

- State Planning Policy 3.7 Planning in Bushfire Prone Areas;
- Guidelines for Planning in Bushfire Prone Areas;
- Australian Standard for the construction of buildings in bushfire-prone areas (AS3959-2009);

The purpose of the BMP is to:

- provide guidance on how to plan for and manage the bushfire risk to future life and property assets of the project area through implementation of a range of bushfire management measures;
- outline how future on-site assets can be protected during the summer months when the threat from bushfire is at its peak; and
- achieve consistency with the objectives and requirements of the current bushfire risk management planning regulations, policy and guidelines.

### 2.4.1 BUSHFIRE ATTACK LEVEL ASSESSMENT

As depicted on the Bushfire Attack Level map contained within the BMP, all of the proposed development areas have capacity to be located within areas of Bushfire Attack Level (BAL) -12.5 or lower, and are not considered to be subject to a bushfire hazard risk.

The existing road reserves (Layman Road) ensure development is avoided throughout all areas of BAL-FZ and BAL-40.

## 2.5 HERITAGE

### 2.5.1 ABORIGINAL

A search of the Department of Aboriginal Affairs (DAA) Aboriginal Heritage Inquiry System identified that the closest aboriginal site is the Korilya Stud Skeletal material/Burial Site (Place ID 4932), which falls within Lot 9507, but sits outside the Structure Plan area, about 210 m east. No Aboriginal places exist within the subject site. Advice was sought from Brad Goode & Associates on the Korilya Stud Skeletal site, who advised material from this grave has been previously collected and forwarded to the Museum of Bunbury COB when discovered (refer **Appendix E**). The site was examined by WAM officers at the time but nothing else was visible or found. The material was then re-buried at an alternative site in Capel on behalf of the DAA. Therefore, it is confirmed that the subject site does not contain material that is associated with the Aboriginal Heritage Listing. As the boundary of this Site ID 4932 still exists on the eastern portion of the site, liaison with the DAA will occur during the structure planning of Area 2 to confirm any administrative requirements.

### 2.5.2 EUROPEAN

The State Heritage Office's inherit database did not identify any Federal, State or Local heritage places or listings within the subject site. A Heritage Place listed by the City of Busselton, called Jim Richardson's Cottage (Heritage Place No. 17288) exists directly to the south of the site adjacent to Layman Road. The cottage that had heritage significance has been demolished. This Heritage Place is listed under the Municipal Inventory as a Category 5 Place that means limited actions are required and could be limited to recognition via interpretation or signage.

## 2.6 MOVEMENT NETWORKS

### 2.6.1 REGIONAL ROADS

The subject site is connected to the regional road network (Bussell Highway) via Layman Road which connects into Peel Terrace.

### 2.6.2 DISTRICT AND LOCAL ROADS

#### 2.6.2.1 LAYMAN ROAD

Layman Road which runs along the boundary of the site is classified as a Local Distributor Road under Main Roads WA's Functional Road Hierarchy. Layman Road is constructed as a kerbed two-lane undivided road with sealed shoulders and bicycle lanes in both directions. No upgrading will be required. The speed limit along Layman Road is 70km/h adjacent to the site and reduces to 60 km/h on approach to Lanyard Boulevard. Layman Road has a total of 2,701 Vehicles Per Day in both directions.

#### 2.6.2.2 NAVIGATION WAY

Navigation Way is classified as an Access Road and is constructed as an un-kerbed, two-lane undivided road. It has a 60km/h speed limit which reduces to 50km/h at the eastern end. Navigation Way has a total of 4,000 Vehicles Per Day in both directions.

#### 2.6.2.3 OTHER EXISTING LOCAL ROADS

The remainder of the road network consists of a series of Access Roads constructed as kerbed, two lane undivided roads operating under a 50km/h speed limit. The daily traffic volumes on all other access roads are estimated to be less than 150 vehicles per day.

#### 2.6.2.4 INTERNAL TRANSPORT NETWORK

The internal road network will consist of a modified grid of access roads and laneways. The residential lots fronting Layman Road will be accessed via a service road. The most common proposed road reserve width is 15m.

### 2.6.3 WALKING AND CYCLING

A footpath will be provided along at least one side of all collector roads and adjacent to POS.

Paths are not considered necessary along the lower order access road and laneway network as these roads will carry relatively low volumes of traffic and any pedestrians or cyclists can reasonably walk along the road or verge where it is safe to do so. This methodology is consistent with the surrounding development.

## 2.6.4 PUBLIC TRANSPORT

The closest available bus stops are located just beyond 500 metres from the subject site. The public transport demand of the subject site is expected to be low and the currently available public transport services are considered to be sufficient.

For school students there are existing school bus services operating adjacent to the subject site including School Special 736 and 737 which operate along Navigation Way and Layman Road.

The developer and the City will consult with the Public Transport Authority regarding the expansion of existing bus routes and frequencies, or introduce new services to encourage the use of public transport as development in the area reaches completion.

## 2.7 SERVICE INFRASTRUCTURE

An Engineering Servicing Report has been prepared by TABEC Civil Engineering Consultants in support of the Structure Plan (refer **Appendix F**). The objective of the Servicing Report is to identify the matters to be addressed as part of the subdivision stage and to confirm that the land is capable of being developed for residential purposes. The Servicing Report suggests there are no constraints which will significantly impact the development of the site.

### 2.7.1 WATER RETICULATION

Current planning indicates that the subject site would likely be serviced by an existing distribution main located in Layman Road. The distribution main will be required to be extended along Layman Road as development on the subject site progresses, ultimately connecting to the existing distribution main west of Gunwale Elbow. The existing water reticulation mains located in Pennant Boulevard will also be extended to service the subject site.

The subject site will include a standard water reticulation network in accordance with Busselton Water requirements, and upon finalising the Structure Plan and during the subdivision phase, Busselton Water will undertake a hydraulic model for the subject site to determine the reticulation pipe sizes and ensure each lot meets their minimum level of service.

### 2.7.2 SEWERAGE RETICULATION

The Water Corporation has existing planning that covers the subject site, and has advised that the site can be serviced pending augmentation of the existing wastewater infrastructure.

The Busselton PS12 Vacuum Pumping Station is located adjacent to the subject site on the southern side of Layman Road. Two DN150 vacuum mains originate from the pumping station and branch out westward and eastward along Layman Road serving the existing Port Geographe residential areas. The westward vacuum main traverses along Layman Road before heading north through the subject site and along Salamanda Drive.

Subject to orderly planning, staging and scheduling of development on the subject site, the Water Corporation will fund any headworks and the Developer will be responsible for funding reticulation works. The Water Corporation anticipates the extension of the vacuum sewer system will occur, which involves augmentation over three stages.

### 2.7.3 POWER

Based on the Western Power Standards, it is anticipated power requirements for the subject site is approximately 4.79MVA.

An internal underground electrical distribution system will be provided in accordance with the requirements of Western Power to supply lots within the subject site. This will include both high and low voltage cables and the necessary transformers and switchgear to be installed throughout the development.

Ultimately high voltage interconnection to the existing cables in Layman Road, Salamanda Drive and Headstay Cove will be necessary to complete a high voltage ring as required by Western Power. Staging of the development will influence the timeframes for construction of the high voltage ring.

Street lighting will also be required as part of the development in accordance with the Western Power and City of Busselton guidelines.

## 2.7.4 TELECOMMUNICATIONS

The subject site is within NBN Co's fibre footprint and is eligible to receive high-speed fibre optic telecommunications services.

## 2.7.5 GAS

ATCO Gas has advised the existing gas network has the capacity to supply the subject site without the need for upgrading any existing assets.

## 2.8 STORMWATER MANAGEMENT

360 Environmental have prepared a Local Water Management Strategy (LWMS) in accordance with Better Urban Water Management (WAPC, 2008) to support the development of the subject site. The key principles of integrated urban water management are:

- minimise total water use in the development area;
- protect infrastructure and assets from inundation and flooding;
- manage groundwater levels to protect infrastructure and assets; and
- protect environmental values of receiving water bodies.

In general, the road reserves will be drained using a series of side entry pits and road grates connected by a concrete pipe and junction pit network sized to accommodate a minor event. Rainfall captured in the road reserve will be directed towards side entry pits and conveyed towards the POS located centrally to the site. Wherever possible, flush kerbing will be used to shed water directly from the road pavement areas into available drainage swales.

The POS areas will feature swales for conveyance and bio-retention areas for water quality treatment rather than traditional stormwater basins. Within the swale network, a bio-retention area will be sized to treat the first 15mm of rainfall. The installation of subsoil drains within the POS areas will also aid with infiltration and treatment of the stormwater.

Following discussions with the Department of Water (DoW) and the City of Busselton, managing the large, rare events (1% AEP) to predevelopment levels is not a priority. Major flows will be accommodated within the road reserves, and will flow towards a series of drainage swales located within areas of POS. Large storm events will not be held on site and rather discharged directly into the canals by overtopping the swales into the outfall pipe network.

The Layman Road swale constructed as part of the Port Geographe development will be utilised for stormwater storage and treatment as per the previously prepared Cardno UWMP (February 2009) for portion of the Structure Plan area catchment that drains towards Layman Road.

Two existing drainage catchments from the established residential areas north of the site discharge into the subject site. As part of the future development conveyance of these catchments downstream to the ultimate canal-outfall will be required as part of the Newport Geographe development. Water quality treatment of the flows from these external catchments is not considered necessary by DoW and City of Busselton.

Groundwater within the subject site is proposed to be controlled using a subsoil drainage system located within road reserves and POS. The presence of the subsoil drainage lines will also promote vertical movement of stormwater through the swale soil structure, which will assist in soil absorption of nutrients and other pollutants, while also preventing stormwater from becoming a mosquito and algae risk through excessive ponding times.

Direct lot connections to the piped stormwater network may be utilised within the subject site to minimise groundwater recharge and maintain adequate clearance to groundwater levels. Whilst direct connection of lots to the stormwater network may generally not be considered consistent with current Best Management Practice, in this instance drainage conveyance will only be provided for roof areas. These roof areas are not considered to have significant potential to contribute contaminants to stormwater that cannot be treated via the POS swales consistent with the approach for stormwater runoff from road reserves.

The ultimate destination for all stormwater runoff generated from development on the subject site will be the canal system, via direct discharge or via groundwater discharge. Discharge of stormwater runoff will not occur into the Vasse-Wonnerup Estuary.

# 3 STRUCTURE PLAN

The Structure Plan provides for a variety of housing choices through a variety of density R-Code ranges including R15-R20, R25-40, R40-R60 and R80-100. The density code ranges are identified on the Structure Plan. The Structure Plan also depicts the areas of POS, which include drainage areas, informed through urban design and hydrological modelling, and Major Access Streets informed through urban design and traffic modelling.

## 3.1 DESIGN PRINCIPLES

### 3.1.1 STRUCTURE PLAN RESPONSE TO ENVIRONMENTAL ASSETS AND PHYSICAL CONSTRAINTS

#### 3.1.1.1 SITE ANALYSIS

An Opportunities and Constraints exercise was undertaken in preparation for design considerations over the site. As detailed in **Section 2** of this report, the subject site is relatively free of significant environmental and physical constraints. The principle considerations are identified on the Site Analysis in **Figure 4** with the design responses in **Table 4**.

**TABLE 4: DESIGN RESPONSE TO SITE ANALYSIS**

ANALYSIS ITEM	RESPONSE
Existing Landform	Create a development pattern that responds to and utilises the existing landform.
Open Space Areas	Future high amenity has been maximised through density and overlooking lots adjacent to proposed open space areas.
Existing Waterway Amenity	The existing waterways offer a high level of amenity which will be utilised by the creation of the future Waterfront Activity Node.
Waterfront Activity Node	A Waterfront Activity Node will provide a community focal point for the development, with key open space areas and development to overlook the marina acting as a gateway to new and existing waterways and the ocean.
Early Lot Release	By staging the development over the entirety of the subject site, it will enable sufficient lots to be released to satisfy the market, whilst providing sufficient time to conduct the analysis required to later develop the lots surrounding the waterways.
Existing Road Connections	Provide connections to existing local road connections including Navigation Way and Layman Road.
Higher Density Potential	Higher density is proposed in areas which maximise amenity, including adjacent to the future Waterfront Activity Node and POS.
View Corridors	Existing view corridors have been maximised through public links and lot orientation, providing vistas to local amenity and natural features such as the Vasse-Wonnerup Estuary and the Port Geographe Marina.
Central Estate Entry	A key central estate entry is proposed from Layman Road (south) providing direct access to the estate.
Green Link	A formalised POS and green link to protect the views towards the waterways and community focal point and provide an attractive vehicular and pedestrian route through the estate.
Drainage	Integration of drainage areas into POS in consideration of low flat nature of the site and necessary conveyance to canal waterways.
Access restrictions	Access restrictions apply to Layman Road, consequently design to respond by applying service roads for access to lots adjacent.



## LEGEND
















-  Site Boundary
-  Promote orientation of lots overlooking the Vasse-Wonnerup Estuary and its natural surrounds
-  Proposed development to provide a seamless union to existing surrounding developed areas
-  Development pattern to give careful consideration to the natural surrounds and provide vistas to local amenity and surrounding natural features such as the Vasse-Wonnerup Estuary
-  Create a development pattern that responds to and utilises the existing landform
-  Careful consideration required to proposed key community focal point area and existing canal development
-  Where possible provide built form outcomes sensitive to passive solar orientation requirements whilst considering surrounding amenity
-  Consider higher density development areas adjacent to amenity, promoting passive surveillance opportunities and activation.
-  Provide new open space areas with high amenity whilst considering existing surrounding open space areas
-  Opportunity to provide 'green' corridor links between open space areas
-  Consider drainage conveyance within road and open space networks
-  Provide internal road network with a clear hierarchy and provide a seamless connection to the surrounding existing network
-  Opportunity to enhance streetscape character of Layman Road
-  Direct lot access restriction to Layman Road as such design will need to consider appropriate outcome and arrangement
-  Opportunity to provide street verge planting on all streets



Figure 4 - Opportunities and Constraints



3.1.2 CONCEPT CHARACTERISTICS

In response to the Site Analysis, specific design characteristics were prioritised in preparing the Development Concept Plan. These primary considerations are identified on the Concept Characteristics in **Figure 5** and comments in Table 5.

TABLE 5: KEY DESIGN CHARACTERISTICS

CHARACTERISTIC	COMMENT
Drainage requirement	Orientate local roads and POS to support drainage direction into the canals rather than into the estuary. Provision of swales for unique streetscape amenity and stormwater management.
Diverse housing choices	Provide a diversity of housing choices, with higher density adjacent to areas of amenity, including POS and the Waterfront Activity Node.
Distinct neighbourhoods	Provide distinct neighbourhoods within the development.
View corridors	Subdivision road direction should enhance view lines along these public realm corridors between the dry areas connecting to the canals. The design provides a view corridor from the eastern edge of the site looking out towards the pedestrian bridge and the Port Geographe Marina.
Public Open Space	Position POS in response to existing site characteristics of existing drainage patterns and geology. Interlink POS elements with a robust pedestrian pathway network.
Waterfront Activity Node	A Waterfront Activity Node will be provided in the future to be positioned at the end of the central canal, providing public access to the water's edge. The street network surrounding the Waterfront Activity Node will be directed to provide easy access to it.
Environmental sustainability	Create a development that embraces environmental sustainability through water sensitive urban design.
Relationship with natural surrounds	Enhance and maximise the relationship between development and the natural surrounds of the Vasse-Wonnerup Estuary

Surveillance	Provide surveillance and activation adjacent to high amenity, open space and key focal areas such as the Waterfront Activity Node.
Aesthetic streetscapes	Create high amenity and highly aesthetic streetscapes throughout the development incorporating pedestrian paths and street tree planting.

## LEGEND













-  Site Boundary
-  Provide a development that is responsive to the natural environment
-  Create a development that embraces environmental sustainability
-  Provide diversity of housing choices
-  Provide a transition to existing residential areas
-  Provide distinct neighbourhoods within the development
-  Promote surveillance and activation adjacent to high amenity, open space and key focal areas
-  Facilitate and celebrate key focal areas
-  Enhance and maximise the relationship between development and the natural surrounds of the Vasse-Wonnerup Estuary
-  Provide diverse range of open space and amenity within a walkable catchment
-  Create a low-speed and high amenity environment within the development with an emphasis on Layman Road providing for higher speeds and traffic volumes
-  Create high amenity and highly aesthetic streetscapes throughout the development



Figure 5 - Concept Characteristics

### 3.2 DEVELOPMENT CONCEPT PLAN

The Development Concept Plan in **Figure 6** has been prepared to support the Structure Plan by providing an illustration of the development intent. This illustration is indicative only; however, it assists in understanding and guiding residential density allocation and movement network recommendations. Importantly, the Development Concept Plan establishes the key design themes in which the subdivision and estate development will be guided. Key elements / Development Concept Plan Notes include (as referenced in **Figure 6**):

1. **Public Open Space:** Situated in various locations throughout the plan, providing several passive and active recreational functions and incorporating high amenity:
  - estate focal point/node on key entry view-line;
  - landscaped to accommodate key active play area(s);
  - provides view corridors towards the Vasse-Wonnerup Estuary and the Port Geographe Marina;
  - easily accessible and within walking distance for all residents; and
  - natural outlook for adjacent residential development.
2. **Boulevard Entrance Road:** Landscaped entrance road providing high amenity, and a natural themed character and a centralised drainage function. Intended to enhance network of landscaped connections for pedestrian amenity.
3. **Secondary Estate Entrance Roads:** Landscaped entrance roads with distinctive road cross section to maximise amenity. Single sided driveway access is proposed to prioritise objectives for this road. Whilst outside the Structure Plan area, an Entrance Road is provided adjacent to the POS in the Stage 1 subdivision area, which will provide an alternative access into the estate in addition to the two Entrance Roads identified on the Structure Plan.
4. **Service Street:** Specifically located service roads to achieve perimeter development orientated towards the Vasse-Wonnerup estuary without direct driveway vehicle access onto Layman Road.
5. **Lot Diversity - Traditional Lots:** Main lot type, front vehicle access and orientated to achieve solar efficiencies for buildings. A diverse lot size range is achievable in the structure with use of various lot depths and frontage widths.

6. **Wide Traditional Lots:** Proposed front access wider lots located along northern edge of subject site to provide a transition from similar sized lots in existing residential areas to development within the subject site.
7. **Permeable Road Network:** A modified grid layout accommodates a series of highly interconnected streets based on Liveable Neighbourhoods' recommendations and its suggested road hierarchy. These streets easily connect to Layman Road and Navigation Way for easy external access, and the internal Major Access streets as depicted on the Structure Plan providing seamless connection to key areas of POS and the Waterfront Activity Node.
8. **High Density/Apartments:** Two high density apartment sites are located adjacent to POS and the Waterfront Activity Node, being highly accessible and providing an alternative form of affordable housing within the development. These sites are considered appropriate for high density development given their location and views to the Port Geographe Marina and beyond.
9. **Medium Density Precincts:** Medium density precincts will allow for a diversity of lot product and alternative affordable housing options adjacent to areas of high amenity such as POS and the Waterfront Activity Node. Additional detail is provided within **Section 3.4** regarding landscaping and within **Appendix G** – Transport Impact Assessment regarding service vehicle access.

As depicted in **Figures 7, 8** and **10** further detailed conceptual design has been undertaken to demonstrate a vision for these areas which will accommodate narrow lot housing which will be detached, semi-detached or attached. Strong built form elements such as two-storey, balconies, and outdoor private terrace areas all of which will provide optimal surveillance of the adjoining linear parks / pedestrian thoroughfares. Combined with high quality landscaping elements these precincts will provide alternative housing options with high amenity for residents.
10. **Pedestrian Access:** Resident access to public amenity has been prioritised with the location of extensive pedestrian links maximising neighbourhood permeability and POS entry.



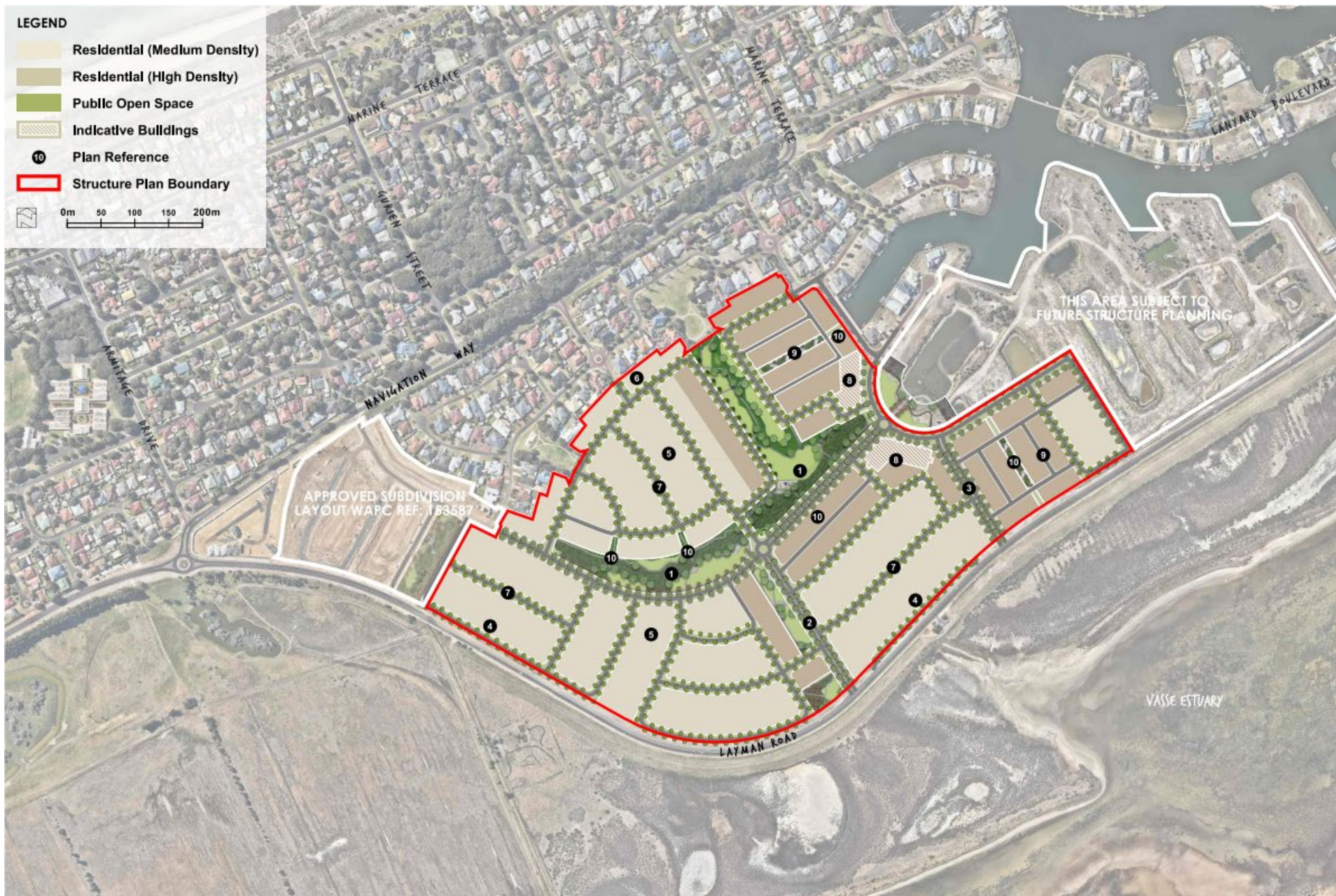


Figure 6 - Development Concept



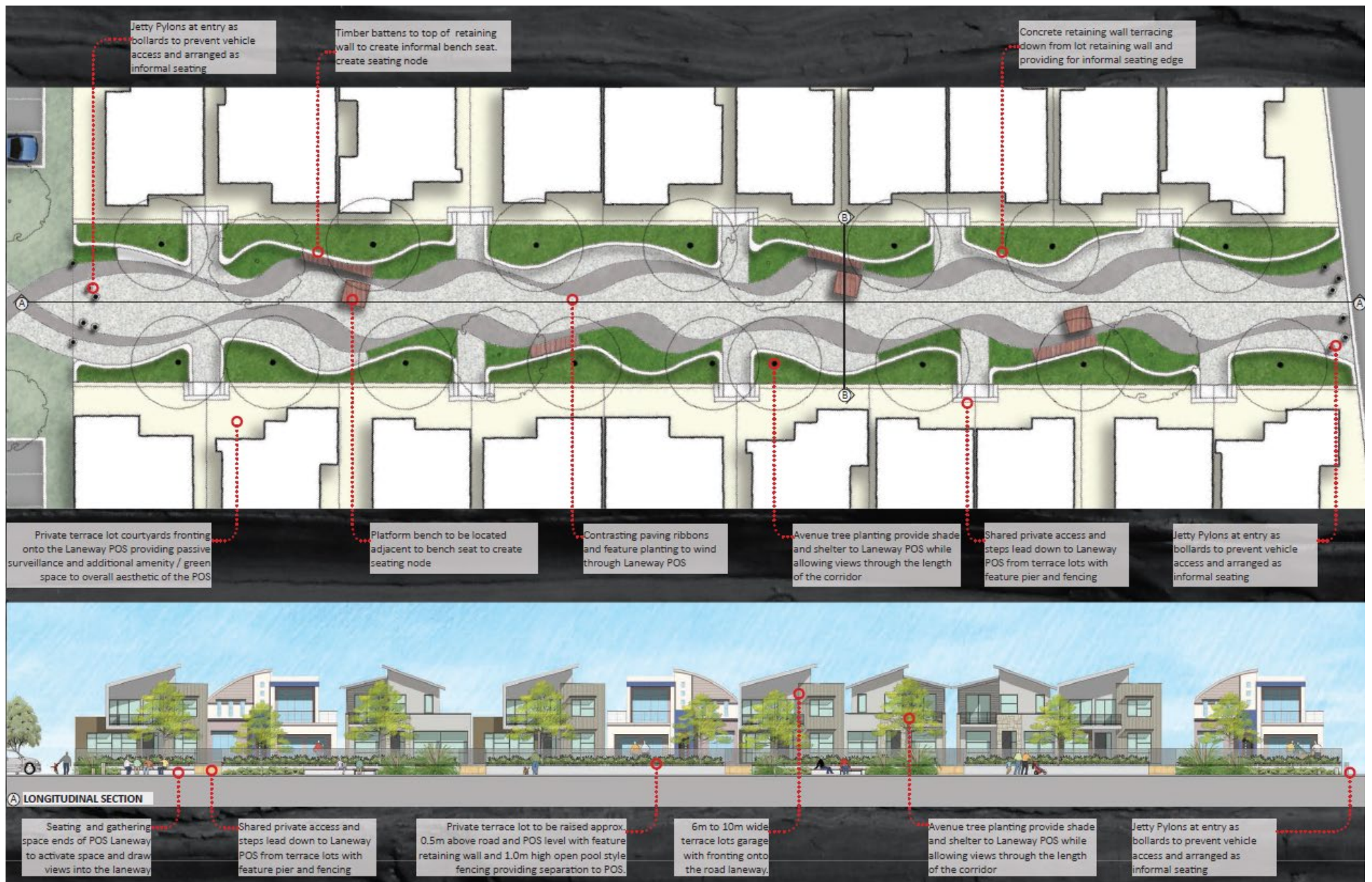


Figure 7 - Conceptual Design Medium Density Precincts



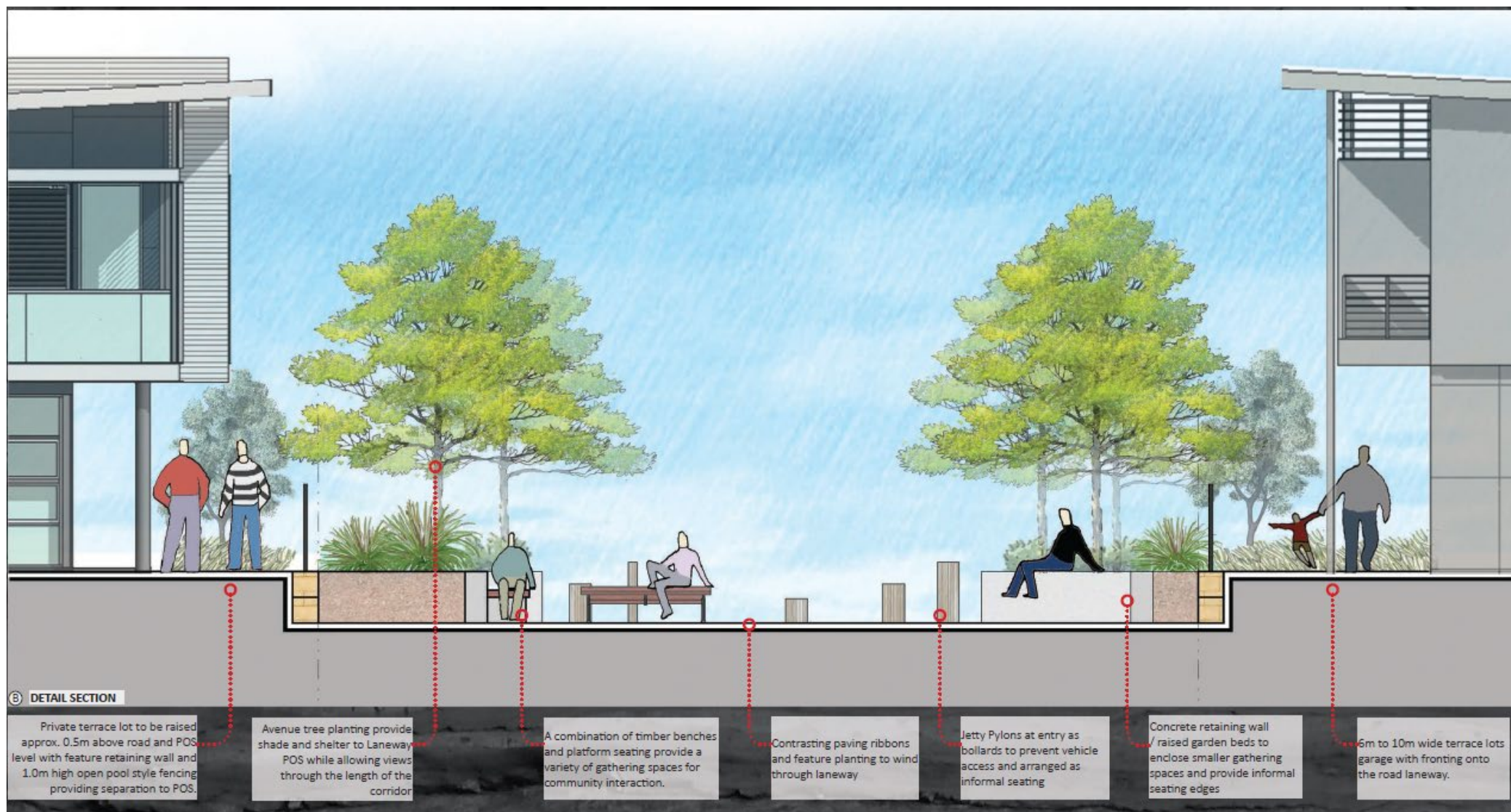


Figure 8 - Conceptual Design Medium Density Precincts

### 3.3 LAND USE

The primary land use within the Structure Plan area is residential supplemented by open space and an internal road network. A summary of the land uses and their areas are provided in **Table 6**.

#### 3.3.1 RESIDENTIAL

The Structure Plan provides for a variety of housing choices through the designation of residential R-Codes density ranges. The density codes and their applicable lot typology are detailed in **Table 7**. The allocation of specific and refined residential densities shall be identified at the subdivision stage through the provision of a Residential Density Code Plan.

The density code ranges applied on the Structure Plan are consistent with those recommended by the WAPC's Structure Plan Framework August 2015. A description of the density code ranges and their intent is outlined below:

1. **Residential R15 – R20:** Located at the northern edge of the Structure Plan area to provide a transition for existing residential development which is an R15 density code. It is intended that lots subdivided in these areas will be of a similar size and type to adjoining existing residential development. The density code range will match with the existing residential coded development.
2. **Residential R25 – R40:** This density code range will apply to the majority of land within the Structure Plan which will maximise flexibility for landowners to respond to market conditions and demand. It will provide for front accessed lots and traditional housing with a range of lot sizes intended. This range will also ensure that individual development stages can provide a range of lot and housing types without any particular stage being oversupplied with a particular lot type due to a restrictive density code. Based on the developer's intent and in response to market conditions, it is expected that the majority of housing will be in the R25-R30 range, with medium density housing of an approximate R40 density code applying closer to key access roads, and public amenity such as POS incorporating a range of smaller front accessed 'squat' lots.

3. **Residential R40 – R60:** This density code range will generally accommodate alternative smaller affordable housing options, which will typically be accessed via a rear laneway. It will provide an opportunity for detached and semi-detached housing in R40 situations, with smaller attached terrace housing in situations where an R60 density code will apply. This density code range will prove important for smaller homes where occupancy rates are lower for residents such as retirees. Importantly, this density code range has been located adjacent to areas of high amenity to overlook POS; for easy access to the Waterfront Activity Node and to maximise potential view corridors to the Vasse-Wonnerup Estuary and the Port Geographe Marina.
4. **Residential R80 – R100:** This density code range is intended to accommodate apartment style living opportunities to diversify the housing typology and maximise alternative affordable housing opportunities. It will also allow for appropriate built form opportunities of two key locations adjacent to the Waterfront Activity Node, at the intersection of two Major Access Streets. This location will allow for easy access for residents to areas of high amenity and will maximise views to the Port Geographe Marina and beyond. Depending on the final development design for these sites, an R80 or slightly higher R100 density code will apply, based on desired development outcomes and plot ratio and height criteria specified by the Residential Design Codes.





**TABLE 6: STRUCTURE PLAN LAND USE SUMMARY**

Structure Plan Zone / Reserve	Area (Ha)
Residential	22.6186
Roads	10.6919
Public Open Space (including drainage)	4.9639

*Note: The area of POS above includes 5,219m<sup>2</sup> of POS (POS 1 on the POS Plan) which is to the west of the Structure Plan area contained within Stage 1 of the overall estate development, as approved under WAPC Ref. 153587.*

**TABLE 7: DENSITY CODE RANGES AND LOT AND HOUSING TYPOLOGY**

Density Code Range	Typical Lot/Dwelling Type and Size
Residential R15 – R20	Larger traditional, front accessed lots <ul style="list-style-type: none"> <li>15.0m x 30.0m – 450m<sup>2</sup></li> <li>17.0m x 30.0m – 540m<sup>2</sup></li> </ul>
Residential R25 – R40	Traditional, front accessed lots: <ul style="list-style-type: none"> <li>12.5m x 25.0m – 312.5m<sup>2</sup></li> <li>15.0m x 25.0m – 375m<sup>2</sup></li> <li>12.5m x 30.0m – 375m<sup>2</sup></li> <li>15.0m x 30.0m – 450m<sup>2</sup></li> </ul> 'Squat', front accessed lots: <ul style="list-style-type: none"> <li>15.0m x 20.0m – 300m<sup>2</sup></li> <li>12.5m x 22.0m – 275m<sup>2</sup></li> <li>15.0m x 22.0m – 330m<sup>2</sup></li> </ul>
Residential R40 – R60	Terrace, rear accessed lots: <ul style="list-style-type: none"> <li>6.0m x 25m – 150m<sup>2</sup></li> <li>6.0m x 30.0m – 180m<sup>2</sup></li> <li>7.5m x 30.0m – 225m<sup>2</sup></li> <li>10.0m x 30.0m – 300m<sup>2</sup></li> </ul>
Residential R80 – R100	Apartments: <ul style="list-style-type: none"> <li>1 (bedroom) x 1 (bathroom)</li> <li>2 x 2</li> <li>3 x 2</li> </ul>

### 3.3.1.1 DENSITY TARGETS

*Liveable Neighbourhoods* recommends that in new urban areas, densities of at least 15 dwellings per urban hectare, and an average of 22 dwellings per site hectare (encompassing land purely zoned for residential purposes) should be provided.

The applicable density targets under the Structure Plan as measured in accordance with *Liveable Neighbourhoods* are 18.92 lots per gross hectare and 31.57 lots per net site hectare; based on 714 dwellings.

The density codes applied and the resultant lot typology will accommodate maximum flexibility for the developer, whilst addressing the needs of the local residential housing market. There are a number of different lot types which will provide ample opportunities for purchasers to select their lot and a project home to meet their needs.

The Development Concept Plan suggests a potential yield of at least 599 lots in addition to approximately 115 apartments, accommodating a total of 714 dwellings. This could accommodate a total population of up to 1,907 people based on 2.8 people per household in single residential dwellings and 2 people per household in multiple dwellings.

### 3.3.2 OTHER LAND USES

Supporting the Residential land use is the relevant open space reserves, as will be discussed under **Section 3.4** and **3.5**; and public utilities for roads required to service all residential development within the subject site, as will be discussed under **Section 3.6**.

### 3.4 OPEN SPACE

Exclusive of the non-creditable pedestrian links (refer No.'s 6 & 7 below), a total of 4.2745 hectares of Open Space is provided on the Structure Plan of differing forms and functions. The Open Space network is detailed on **Figure 9**. Public Open Space, consists of the following, with the purpose of each respective POS area detailed in **Table 8**.

**TABLE 8: PUBLIC OPEN SPACE NETWORK**

Open Space Reference	Purpose
1. Local Park (outside of Structure Plan area – contained within Stage 1 of Subdivision Approval WAPC Ref. 153587)	Local Park adjacent to a secondary estate entrance (Stage 1). Includes a recreation node with a play space. POS 1 has a large landscape area with limited turf and minimal drainage requirements. POS 1 is surrounded by avenue tree planting to reflect the entrance location.
2. Local Park	A multiple use area consisting of a vegetated drainage swale provided in the centre, with two recreation nodes, pedestrian pathways and feature planting surrounding the swale. Pedestrian pathways also provide a connection north through to residential development. This POS area will provide an estate focal point.
3. Local Park	Local park with no drainage function. Includes feature tree planting, and a north-south pedestrian link as well as multiple passive recreation nodes.
4. Local Park	Local park adjacent to the main estate entrance with no drainage function. Features a pedestrian path surrounded by avenue tree planting, with feature tree planting along the southern edge, reflecting its prominent entrance location
5. Neighbourhood Park	Neighbourhood park which will provide a multiple use function and a connection through to the existing POS area north of the subject site. A drainage swale is located in the southern portion of POS with pedestrian connections provided throughout. A play space is located adjacent to the swale, and there are several pathway activity nodes within this POS. A large area of turf is provided in the northern area

	of POS for recreational opportunities. This POS area will provide an estate focal point.
6. Local Park / Pedestrian Access Way (non-creditable)	Greenway with no drainage function, providing a pedestrian link and vista through to the waterway, with street tree planting either side of the pedestrian path (refer <b>Figure 10</b> ). Subject to further investigations, including liaison with the City, the greenways may be formalised as communal open space within a strata-titled medium density grouped dwelling development and therefore the responsibility of adjoining landowners.
7. Local Park / Pedestrian Access Way (non-creditable)	Greenway with no drainage function. Will provide a pedestrian link and vista through to the Waterfront Activity Node and waterways (refer <b>Figure 10</b> ). Subject to further investigations, including liaison with the City, the greenways may be formalised as community title private open space and therefore the responsibility of adjoining land-owners.

POS identification number referenced on POS Plan



Figure 9 - Public Open Space

### 3.4.1 PUBLIC OPEN SPACE

The location and purposes of each POS has addressed site opportunities and constraints generally associated with drainage requirements, providing a connection with existing development to the north, providing opportunities for appropriate recreation, as well as providing connections and view corridors to the Waterfront Activity Node, the Port Geographe Marina and the Vasse-Wonnerup Estuary. The POS areas have been provided in close proximity to each residence within the Structure Plan area as demonstrated by the walkable catchments detailed on the POS Plan; providing only a short walking distance for all residents to active play and passive recreation areas. The POS will be linked by the permeable road; shared path and footpath network, with key linkages provided by the Major Access Streets.

The POS calculation includes the Stage 1 subdivision area, which includes 5,219m<sup>2</sup> of POS (POS 1 on the POS Plan), which is to the west of the Structure Plan area, as approved under WAPC Ref. 153587. The POS calculation also includes the Stage 1 subdivision area in the 'Total Structure Plan Area' for the purposes of accurately defining the estate area and the POS requirement and provision.

A POS calculation has been prepared in accordance with LN, as detailed in **Table 9**. The POS table identifies a total provision of 10% POS, meeting the requirement under State Government planning policy. In addition to the provision of creditable POS, the site will benefit from:

- its extensive and easy access to existing open space and recreation areas surrounding the subject site, including Geographe Bay which is less than 1km north of the site, open space within Port Geographe, as well as a variety of playing fields within the Busselton Town Centre (refer **Figure 11** detailing POS context and the extents of POS surrounding the subject site);
- its waterfront access to the Port Geographe marina which will provide a range of recreational opportunities for residents; and
- significant investment which will be made by the developer to create the Waterfront Activity Node which will provide for recreational and lifestyle opportunities which will exceed what is typically expected in a residential community.

The POS to be provided in accordance with the Structure Plan and the POS Schedule in **Table 9** will be landscaped by the developer to a standard commensurate to, or above, LN requirements in consultation with the City.

**TABLE 9: PUBLIC OPEN SPACE SCHEDULE**

Public Open Space Schedule		Area (hectares)	
Lots 9507 (structure plan area and Stage 1 subdivision area)		43.2007	
<b>Total Structure Plan Area</b>			43.2007
<b>DEDUCTIONS</b>			
D1 - 1:1 Portion of Drainage Basin 1		0.2945	
D2 - 1:1 Portion of Drainage Basin 2		0.1610	
<b>Total Deductions</b>			<b>0.4555</b>
Gross Subdivisible Area			42.7452
<b>Required Public Open Space (10%)</b>			<b>4.2745</b>
<b>PUBLIC OPEN SPACE REQUIREMENTS</b>			
Unrestricted public open space (minimum 80% total)		3.4196	
Restricted public open space (maximum 20% total)		0.8549	
<b>Total</b>			<b>4.2745</b>
<b>PUBLIC OPEN SPACE PROVISION</b>			
<b>Unrestricted Public Open Space</b>			
U1 - 1:5+ Portion of Drainage Basin 1		0.0482	
U2 - 1:5+ Portion of Drainage Basin 2		0.0598	
1 – Local Park (located in Stage 1 subdivision area)		0.5219	
2 – Local Park		1.0533	
3 – Local Park		0.3222	
4 – Local Park		0.2186	
5 – Neighbourhood Park		1.7950	
<b>Total Unrestricted Public Open Space</b>			<b>4.0190</b>
<b>Restricted Public Open Space</b>			
R1 - 1:1 - 1:5 Portion of Drainage 1		0.0209	
R2 - 1:1 - 1:5 Portion of Drainage 2		0.2346	
<b>Total Restricted Public Open Space</b>			<b>0.2555</b>
<b>Total Credited Public Open Space</b>			<b>4.2745</b>
<b>Percentage of Public Open Space Provided</b>			<b>10.0%</b>
<i>Total percentage of structure plan area provided as Unrestricted POS</i>			9.4%
<i>Total percentage of structure plan area provided as Restricted POS</i>			0.6%





Figure 10 - Greenway POS Concept – Medium Density Precinct





Figure 11 - POS Context and Extent of Surrounding POS



### 3.4.2 LANDSCAPE DESIGN

A Landscape Strategy has been prepared by Emerge Associates in order to inform open space development; the LWMS; and bushfire hazard assessment (refer **Appendix H**).

The landscape treatments for the development will occur over a series of distinct areas as outlined below. The project theming, detailing and material selection will unite the project's various areas into one cohesive whole. Refer **Figures 12 and 13** which include the Landscape Concepts.

#### 3.4.2.1 STREETSCAPES

The streetscapes consist of a variety of treatments from typical residential streets with street trees on standard alignments to wider verges in major roads which accommodate landscape planting and drainage within adjacent POS areas where necessary (refer **Figure 13**). Street tree planting will be provided along access streets and avenue tree planting will be provided along the estate entry roads. Footpaths will link the project together. Layman Road verge will be planted with groundcover to provide a soft interface and a landscaped greenway around the site's perimeter.

**Figure 13 Landscape Concept – POS Aerial**



#### 3.4.2.2 PUBLIC OPEN SPACE

POS areas will contain public facilities deemed suitable for the intended local population in consultation with the project team and the City through the subsequent approval process. POS areas will include mounding and earthworks to create interest. The POS areas will contain a variety of materials that suit the project's theming and meet the City's long-term maintenance needs. The POS locations are arranged to provide high level distribution of facilities accessible by all future residents and meeting CPTED and good urban design principles. The POS areas are of a sufficient width to cater for the provision of various active open turf areas for small community events and informal active sports as well as passive recreation, as demonstrated in the **Figures 14, 15, 16** as well as **Appendix H**.

#### 3.4.2.3 DRAINAGE

Drainage will be managed through a variety of treatment typologies including two drainage swales in the central POS areas to capture stormwater. The drainage swales have been designed to have small slopes so that the areas above the first 15mm water level storm event could be used for public activities. Drainage will also be captured within road reserves where feasible, catering for sustainable design approaches and good urban water management practices.







Figure 14 - Cross Section Location

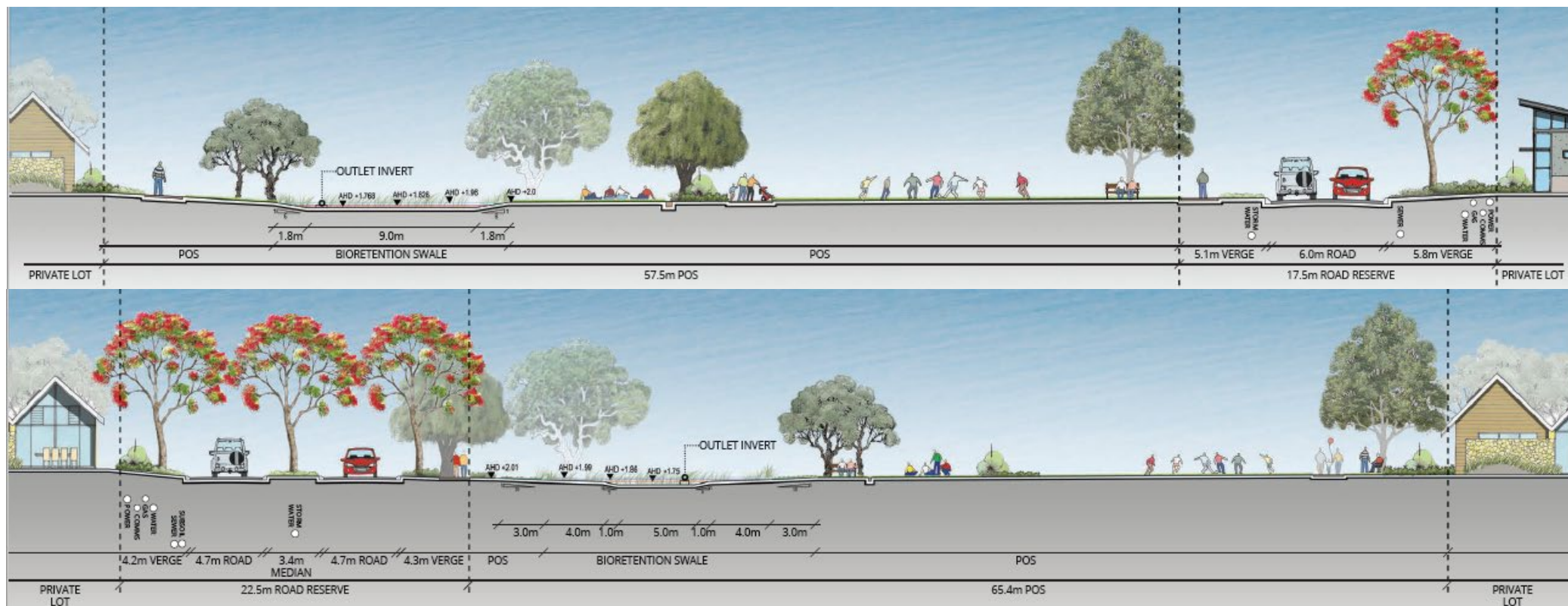


Figure 15 - POS Section – 17.5m Road Reserve and Bioretention Swale Section EE (Emerge Associates, 2018)

## 3.5 WATER MANAGEMENT

### 3.5.1 LOCAL WATER MANAGEMENT STRATEGY

As detailed under **Section 2.8** a LWMS has been prepared by 360 Environmental in support of the Structure Plan (refer **Appendix C**). The LWMS has been developed to establish the concepts and broad level design measures for flood mitigation and stormwater management for the site in accordance with Water Sensitive Urban Design (WSUD). The LWMS incorporates the report prepared by JDA *Interaction of Coastal and Catchment Floods for Determining Port Geographe Finished Floor Levels*, which addresses the 'Australian Rainfall and Runoff 2016' method of assessing coastal hazard risk, including addressing the requirements of SPP 2.6. The intention of the LWMS is to guide the general stormwater management principles and to guide the preparation of the Urban Water Management Plan (UWMP) that will be prepared at the subdivision stage.

The LWMS has been prepared to:

- provide the conceptual stormwater management framework for urban development;
- describe the proposed design measure and Best Management Practices (BMP) to be incorporated in the stormwater management system;
- minimise development construction costs and ongoing operation and maintenance costs for landowners and the City of Busselton; and
- to obtain the Department of Water and City of Busselton's support for the stormwater management strategy.

The Structure Plan has responded to the recommendations of the LWMS and drainage strategy by incorporating areas of POS which limit restricted use areas of POS, which in turn will:

- manage frequent stormwater events via infiltration within POS areas to minimise fill levels and requirements for separation to groundwater;
- incorporate two drainage swales in the POS areas to capture stormwater. The drainage swales have been designed to have small slopes so that the areas above the first 15mm water level could be used for public activities; and
- manage groundwater using subsoil drainage lines.

## 3.6 MOVEMENT NETWORK

A Transport Impact Assessment has been prepared by Shawmac for the Structure Plan and based on the Development Concept Plan (**Appendix G**). The Structure Plan and supporting Development Concept Plan have been designed based on the recommendations of LN relating to the movement network. The Movement Network / Road Hierarchy Plan in **Figure 17** describes and supports this approach.

### 3.6.1 EXTERNAL ROAD NETWORK

The Structure Plan will accommodate a highly permeable grid movement network influenced by the existing road network as depicted on the Development Concept Plan. Based on the indicative dwelling yield for the Newport Geographe development of 950 it is expected that the development will generate up to 936 vehicular trips during the PM peak hour and 807 vehicular trips in the AM peak hour.

The only external road considered to be materially impacted by the Structure Plan is Layman Road east and west of Navigation Way. The base traffic flows along Layman Road are not considered to increase significantly into the future as there are no other adjacent areas of land identified for urban growth in the foreseeable future. Based on the predicted peak hour flows, the current two lane cross section along Layman Road will be sufficient to accommodate the design traffic flows.

### 3.6.2 INTERNAL ROAD NETWORK

The primary road access to the subject site is planned via two new intersections with Layman Road. **Figure 18** details the preferred streetscape section for the main entrance road. A third access is provided at the western end of the development which will be constructed as part of Stage 1. In addition, the proposed development layout includes the extension of Pennant Boulevard, Medusa Way, Headstay Cove and the creation of a new intersection with Waterline View to assist access and traffic distribution within the Structure Plan area. Control Access Places (CAP Roads) or rear laneways will be provided for the lots fronting Layman Road.

The remaining roads within the subdivision will consist of Access Streets (15m) and Laneways (6m). The Access Streets layout is based on a modified grid to accommodate ease of access to the Major Access Streets, with short trips to Layman Road and Navigation Way; finally connecting with the regional road network. The road network has a strong north south and east west layout to maximise solar efficiencies for dwellings and accommodate appropriate drainage.

### 3.6.3 INTERSECTIONS

All intersections will be priority (stop or give way) controlled intersections with the exception of three roundabouts located within the subject site. Based on the predicted traffic flows the proposed intersection types are considered to be adequate.

### 3.6.4 WALKING AND CYCLING NETWORK

A footpath will be provided along at least one side of all collector roads and adjacent to POS.

Paths are not considered necessary along lower order access roads and laneway networks as these roads will carry relatively low volumes of traffic and pedestrians or cyclists can reasonably access along the road or verge where it is safe to do so. This methodology is consistent with the surrounding development.

A bicycle lane is located on either side of Layman Road which provides an additional connection from the subject site to the Waterfront Activity Node.

This pedestrian path network is detailed on **Figure 19**.

### 3.6.5 PUBLIC TRANSPORT ROUTES

As detailed under **Section 2.6.4** there are three bus stops located approximately 500m from the subject site on the northern side of Navigation Way. The road and path network will provide appropriate connectivity for residents to access the public transport network in a safe manner.



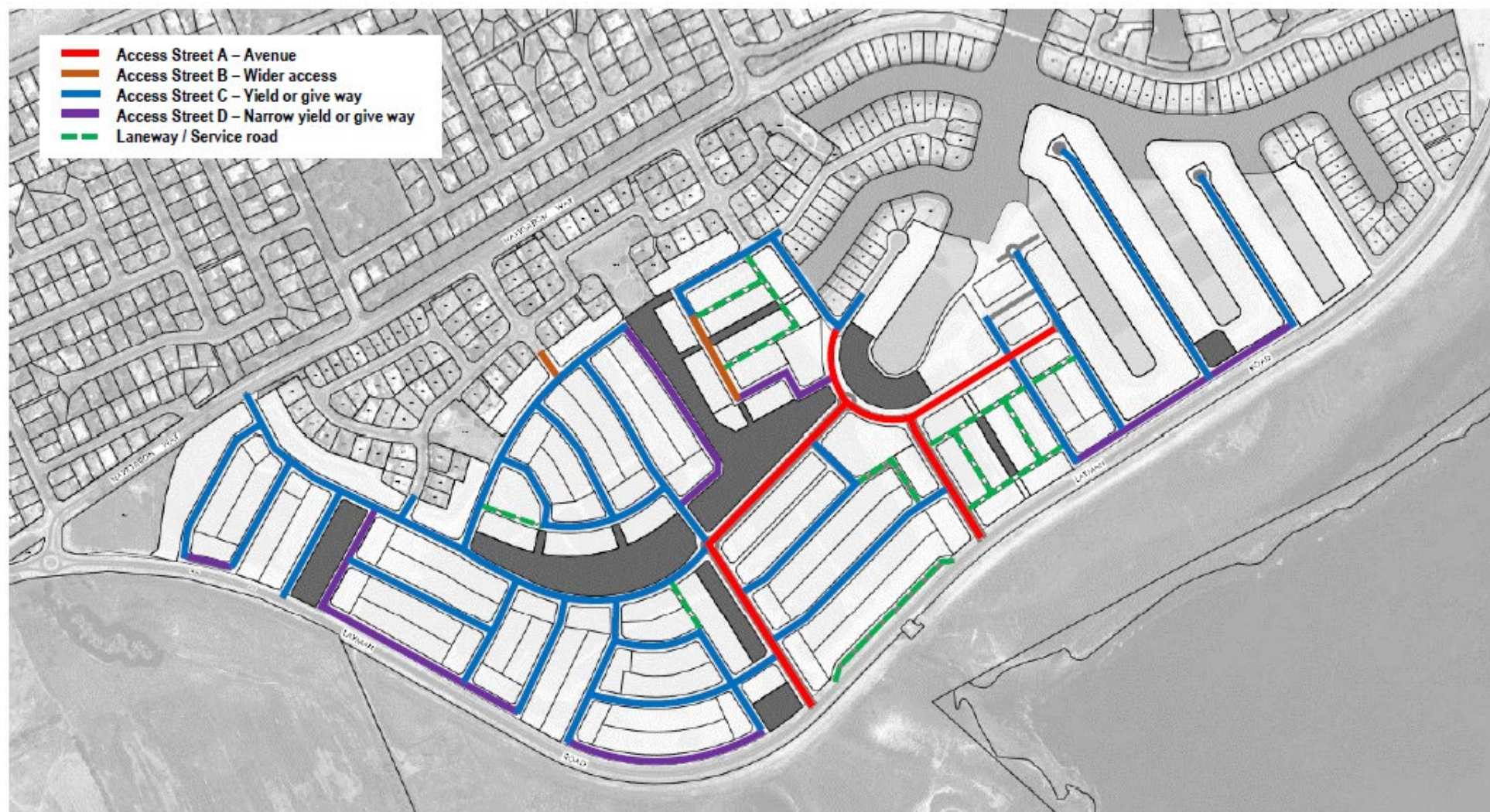


Figure 17 - Road Hierarchy (Source: Transport Impact Assessment, Shawmac 2018)



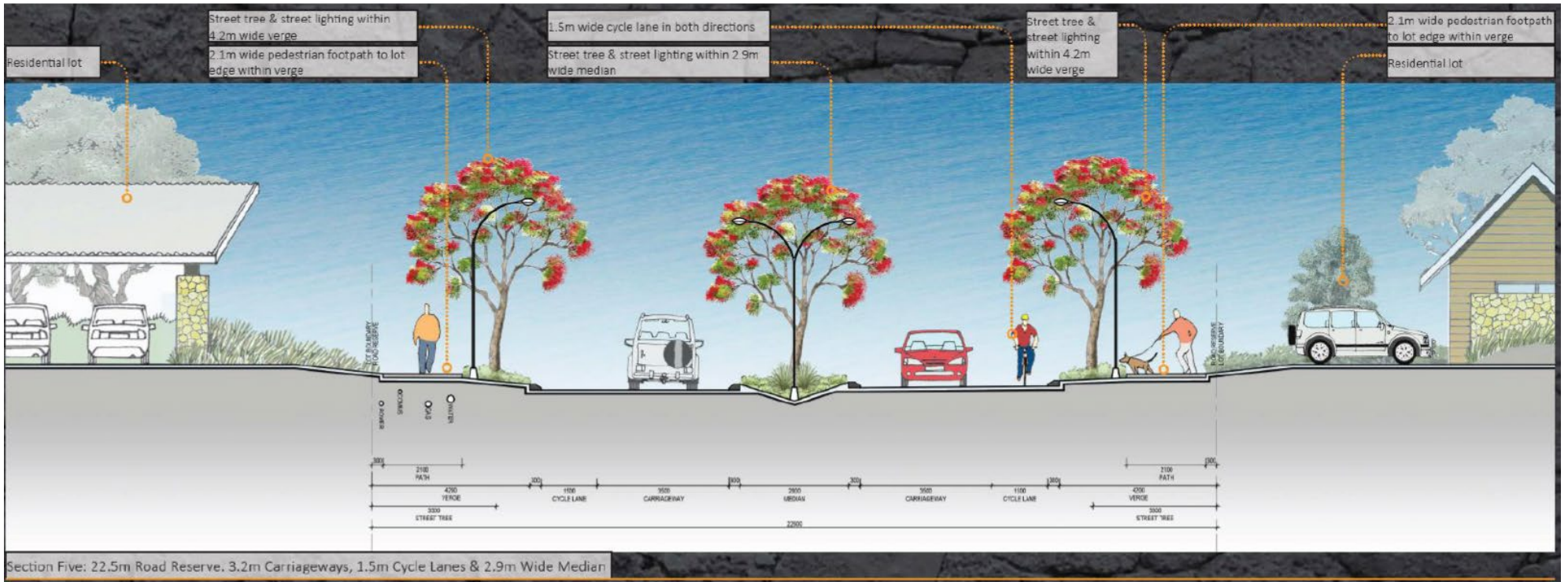


Figure 18 - Streetscape Section – Main Entrance Road (Emerge Associates, 2017)



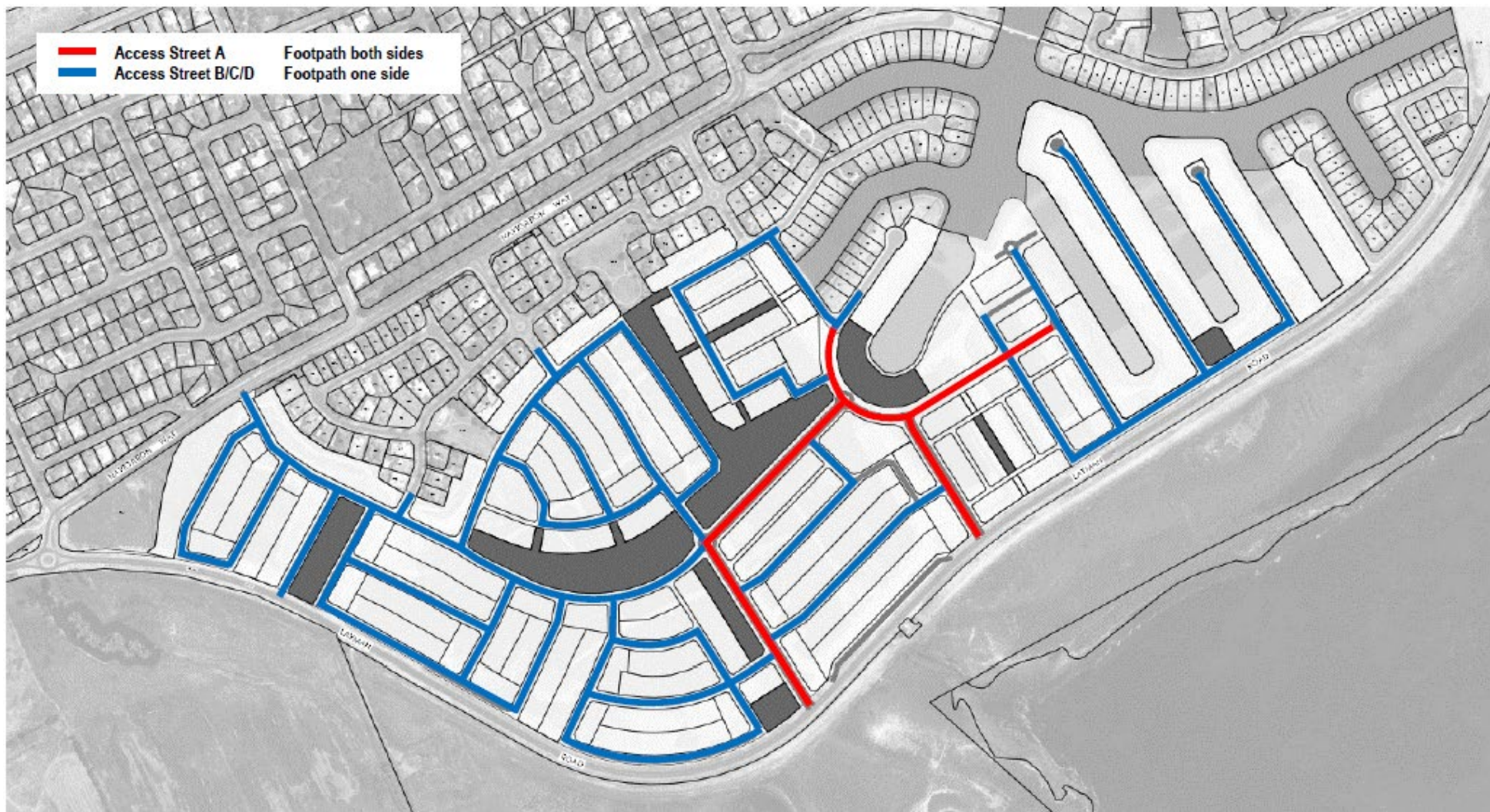


Figure 19 - Indicative path network (Source: Traffic Impact Statement, Shawmac 2018)



### 3.7 DEVELOPMENT CONTEXT AREA 2 – WATERFRONT ACTIVITY NODE

As referenced throughout **Section 3**, the Waterfront Activity Node and development of Area 2 have been considered in the design development of the Structure Plan and Development Concept Plan. Whilst further investigations will pursue regarding the development of Area 2 to accommodate a preferred development layout for the area, conceptual planning has been undertaken in order to provide important vision and context for the overall development.

An indicative concept has been prepared for the Waterfront Activity Node in Area 2 (refer **Figures 20,21,22,23,24**). The concept includes:

1. Waterfront edge incorporating swimming opportunities.
2. POS incorporating active and passive recreation opportunities.
3. Mixed use including activation at the ground level consisting of cafes and retail; and arrange of residential types including single, grouped and multiple dwellings.
4. Key sites identified for apartment style living.
5. Easy public access including boardwalks at the water's edge.
6. Opportunities for boat parking.
7. Extension of existing canal development at the eastern edge providing canal lot opportunities.

Area 2 incorporating the Waterfront Activity Node and canal development will provide an important element for the estate character, providing a central point of connection to the waterways for pedestrians as well as boats. A range of residential densities will be provided including a continuation of canal lots. The Waterfront Activity Node will be highly accessible to existing and future residents with the Structure Plan and Development Concept Plan responding by ensuring easy and convenient access with appropriate residential densities surrounding it.



Figure 20 - Waterfront Activity Node Concept





Figure 21 - Waterfront Activity Node Concept - Terrace Housing



Figure 22 - Waterfront Activity Node Concept



Figure 23 - Waterfront Activity Node Concept - Overview



Figure 24 - Waterfront Activity Node Concept - Boatshed



## 4 IMPLEMENTATION AND STAGING

### 4.1 STRUCTURE PLAN

This Structure Plan will supersede the relevant portion of the adopted Port Geographe Development Plan.

### 4.2 MANAGEMENT PLANS

Amongst others, the following key management plans will be prepared at the subdivision stage, as detailed in Part 1:

- Urban Water;
- Acid Sulfate Soils (as required);
- Mosquito and Midge; and
- Landscape plan.

### 4.3 STAGING

Subdivision of Stage 1 has already commenced as per WAPC approval (reference 153587). Following completion of this, development staging is still to be defined; however, staging is likely to proceed adjacent to Stage 1, starting in the western portion of the site, continuing east. Staging will be indicatively linked to the release of POS or portions thereof.

Stages may be released concurrently depending on the market conditions at the time, with market demand the key determinant of stage release, the number of lots to be included and key infrastructure such as POS development.

Once investigations for Area 2 are completed, a Structure Plan modification will be required to enable development to commence in this area.

Overall it is estimated that the project will have a 10-15-year timeframe.

### 4.4 SCHEME AMENDMENT

In order to enable the land use, density, subdivision and development requirements of the Structure Plan to have effect, over the Structure Plan area the City of Busselton Local Planning Scheme No. 21 is to be amended under Amendment No. 28 to zone the land 'Urban Development' and to include the site within Special Provision Area 69 for subdivision and development control.

As Stage 1 has subdivision approval and is undergoing development, this area will be included in a separate Amendment to be identified with a Residential R30 density code. This will align with the approved plan of subdivision, the developer's intent for the area and provide flexibility for future homeowner's when constructing their homes.

With regard to the application of the 'Urban Development' zone as referenced above, it is understood the City has been progressing Omnibus Amendment No. 3 (Amendment No. 28) to align Local Planning Scheme No. 21 with the Deemed and Model Provisions of the Planning and Development (Local Planning Schemes) Regulations 2015. In doing so, new 'development zone provisions' will be inserted, and a new zone, 'Urban Development', introduced along with a new 'Special Control Area – Structure Plans'.

### 4.5 AREA 2 AND WATERFRONT ACTIVITY NODE

As detailed in **Section 3.7** conceptual planning has been progressed for Area 2 which includes the Waterfront Activity Node. Whilst various further investigation is necessary, the conceptual planning undertaken provides important context for the overall development vision and how the Structure Plan and Concept Development Plan have responded to this.

When investigations have been completed for Area 2 a modification to this Structure Plan will be required to incorporate Area 2, removing it from the Port Geographe Development Plan. This area will also need to be included within the 'Urban Development' zone under LPS 21.

# APPENDIX A

## PRE-LODGEMENT CONSULTATION

# APPENDIX B

# ENVIRONMENTAL ASSESSMENT REPORT



# APPENDIX C

## LOCAL WATER MANAGEMENT STRATEGY

# APPENDIX D

## BUSHFIRE MANAGEMENT PLAN

# APPENDIX E

## ABORIGINAL HERITAGE ADVICE



# APPENDIX F ENGINEERING SERVICES REPORT

# APPENDIX G

## TRANSPORT IMPACT ASSESSMENT

# APPENDIX H

## LANDSCAPE STRATEGY