## VASSE VILLAGE

### PRECINCT STRUCTURE PLAN





**TITLE:** Vasse Village Precinct Structure Plan

**PREPARED FOR:** Perron Developments Pty Ltd & Stawell Pty Ltd

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### **ENDORSEMENT**

This Precinct Structure Plan is prepared under the provisions of the City of Busselton Local Planning Scheme No. 21.

It is certified that Vasse Village Precinct Structure Plan Amendment No. 1 was approved by resolution of the Western Australian Planning Commission on:



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

An officer of the Commission duly authorised by the Commission pursuant to Section 16 of the Planning and Development Act 2005 for that purpose.

### **TABLE OF AMENDMENTS**

AMENDMENT NO.	SUMMARY	AMENDMENT TYPE	DATE APPROVED BY WAPC
1	Inclusion of unplanned Stage 2 area and conversion to Precinct Structure Plan	Minor	11 November 2022

### **TABLE OF DENSITY PLANS**

DENSITY PLAN NO.	AREA OF DENSITY PLAN APPLICATION	DATE ENDORSED BY WAPC

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## SUMMARY

Vasse has always been a place for people to come together. For the Wadandi people, it was a place to live in harmony with the natural environment. For early settlers, it was a new frontier to explore and cultivate. Today, Vasse is one of the fastest growing communities in the South West region. At its heart is Vasse Village, a new place for locals and visitors to shop, relax and connect.

Delivery of the Vasse Village is well underway, with major roads and infrastructure completed and key retailers and service providers now operating. This Precinct Structure Plan (PSP) will guide the development of the Village to completion, ensuring its realisation as one of the South West's most dynamic and interesting local centres.

















### **VISION**

The PSP articulates a vision for Vasse Village as the hub of Vasse Estate and the gateway to the Margaret River region. It will offer distinctive places, interesting products and services, convenience and an inviting location to shop, relax and connect. The Village will have personality and a sense of its own history.



### **ACTIVITY**

The PSP provides for a range of land uses and complementary activities that strengthen existing development within the Village, which includes a full-line supermarket, medical centre, a service station as well as a range of specialty food and beverage and retail outlets. Future land uses will include medium density residential dwellings, office development, a tavern and service commercial uses to support a vibrant, mixed use centre.



### **BUILT FORM**

To support ongoing development, the PSP establishes a range of built form controls that guide the design of buildings. These controls are an extension of those originally established in the prior planning framework, which provide a range of built form typologies to achieve a desired response to the streets and public spaces they define. The PSP will ensure that development maintains an appropriate regional vernacular and supports a core main-street environment along Napoleon Promenade with articulated frontages and weather protection.



### **MOVEMENT**

The PSP guides the delivery of a high-quality movement network designed to accommodate all user needs. Pavement widths and intersection treatments have been planned to accommodate private vehicle and servicing requirements and to prioritise pedestrian and cyclist movement. Key elements of the Village movement network have already been approved and constructed, including the Napoleon Promenade, Coomidup Boulevard and a series of supporting thoroughfares.



### **PUBLIC REALM**

Delivery of key public space within Vasse Village is well underway, with a combination of completed and planned public spaces providing a range of experiences that accommodate a variety of user needs. The PSP identifies a range of public spaces within the Village that have been planned and designed together with streets and buildings to create an integrated and active village environment which fosters community interaction and cultural activities.



### **RESILIENCE**

The walkable urban design and resource-efficient land use mix of Vasse Village established by the PSP supports urban resilience and regional sustainability by concentrating growth and services in close walking and cycling distance to surrounding residential communities and supporting energy conservation, water conservation and sustainable development practices.



# PART 1 IMPLEMENTATION



### 1 PRECINCT STRUCTURE PLAN AREA

This Precinct Structure Plan (PSP) applies to the Vasse Village Centre, being the land wholly contained within the inner edge of the line denoting the PSP boundary on the Precinct Structure Plan Map (Plan 1).

### 2 PRECINCT STRUCTURE PLAN OBJECTIVES

Development within the PSP area will meet the following objectives:

- 1. Create a welcoming and active Village Centre environment that is true to the principles of the broader Vasse Estate:
- Accommodate a diverse and integrated mix of retail, commercial, civic and residential uses;
- 3. Develop a fine grain, high quality local built form vernacular;
- 4. Establish strong sense of place through the use of local materials within the built form and public realm wherever possible; and
- 5. Deliver a high-quality environment for pedestrians and cyclists, integrated with vehicle accessibility.

#### **3 OPERATION**

The date the PSP comes into effect is the date the PSP is approved by the Western Australian Planning Commission.

### 4 STAGING

Staging of development will be governed by commercial considerations.

### 5 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

### 5.1 Land Use Zones and Reserves

Following approval of this PSP by the Western Australian Planning Commission, a Basic Amendment(s) to the City of Busselton Local Planning Scheme No. 21 will be initiated, at an appropriate time, to rezone and reserve the land in accordance with the relevant designations contained on the Precinct Structure Plan Map (Plan 1).

### 5.1.1 Public Open Space

Public Open Space shall be provided generally in accordance with the Public Open Space shown on Plan 1.

#### 5.1.2 Movement Network

- Access shall be provided generally in accordance with the network shown on Plan 1.
- b. Where applicable, easements are to be provided in accordance with Plan 1 and will have the designated access easements marked as notations on the certificate of title.

### **5.2** Activity Centre Character Area Objectives

In accordance with Plan 1, the Vasse Village is divided into three Character Areas. In addition to the overall Activity Centre objectives, development within each Character Area shall have regard for the following specific objectives for that Area:

#### 1. Main Street

- a. Create a vibrant and attractive main street environment along Napoleon Promenade;
- b. Provide a heart for the surrounding community with a distinct sense of place; and
- c. Provide for development that activates the public realm and fosters a pleasant pedestrian environment.

#### 2. Service Commercial

- a. Ensure that car-based commercial uses do not detract from the Main street environment;
- Create a high-quality interface to Bussell Highway and Northerly Street; and
- c. Facilitate excellent pedestrian accessibility and connectivity to the core of the Town Centre.

### 3. Mixed Residential

- a. Bring life and vitality to the village centre through the creation of a local residential population;
- b. Support an urban built form character consistent with local vernacular; and
- c. Accommodate second tier commercial and other uses that complement core retail activities in the main street.

### 5.3 Retail Floorspace

The maximum combined retail floor space for all shop and liquor store (large and small) uses shall be limited to  $6,500m^2$  (NLA). \*

\* It is recommended that Special Purpose Area 65 detailed in Local Planning Scheme No. 21 be amended to reflect the conclusions of the Vasse Village Retail Need and Demand Assessment (Urbis, 2021) that the supportable retail floorspace in Vasse Village is 6,500sqm in the short term. As recommended in the Report, provisions should also be outlined to provide flexibility for the centre to expand in the future in line with market demand and its role in the hierarchy.



### **Development Standards**

The development standards set out below apply to all development within the applicable Character Area.

A. MAIN STREET				
RESIDENTIAL DEVELOPMENT	R-Code	R-AC4 (except where standard is specified below)		
	Ground Floor Residential Use	Not Permitted		
BUILDING	Maximum Height	3 Storeys		
HEIGHT	Minimum Height	2 Storeys, or 1 Storey with equivalent 2 storey façade to Napoleon Promenade / Coomidup Boulevard		
BUILDING	Front	Mandatory Nil setback to 90% of frontage		
SETBACKS	Side	Minimum Nil		
	Rear	Minimum Nil		
BUILDING FRONTAGE	Primary Entrance	Tenancies with direct frontage to Napoleon Promenade / Coomidup Boulevard must provide direct access to Napoleon Promenade / Coomidup Boulevard. No external public entry from the rear of such tenancies will be permitted.		
	Windows at Ground Level	Minimum glazing for 50% of front façade area		
	Awnings	Minimum depth 2.4m for full building frontage to primary street		
NOISE MITIGATION		Noise sensitive premises shall be designed to attenuate ambient noise so that sound received does not exceed the assigned levels set out in the Environmental Protection (Noise) Regulations 1997.		
		Where road noise is above LAeqdB 55 at the of construction, treatment packages recommended by the Vasse Newtown Dawson Village Centre Traffic Noise Assessment (Lloyd George, 2008) shall be implemented for residential uses.		
CAR PARKING		<ol> <li>An automatic concession of 10% is applicable to the on-site parking requirements set out in the City of Busselton Local Planning Policy 8A for single storey development.</li> </ol>		
		2. Where first floor development is proposed, an automatic concession of 100% is applicable to on-site parking requirements for the first-floor component, subject to satisfaction of the following criteria:		
		3. Where residential dwellings are provided, residential parking is provided in accordance with the Residential Design Codes, and resident parking (excluding visitor parking bays) is excluded from any reciprocal use arrangement;		
		4. Where residential dwellings are provided, the applicable discretion for the first floor component is transferred to ground floor parking requirements, to enable a commensurate reduction in the number of bays required for ground floor uses;		
		5. A Parking Plan is prepared for the land denoting:		
		a. Dedicated bays for resident parking;		
		<ul> <li>Bays available for reciprocal parking arrangements (including visitors bays for residential uses);</li> </ul>		
		c. Disabled parking and loading bay(s); and		
		d. Access easements;		
		6. The landowner is to prepare a restrictive covenant, legal agreement or other mechanism to the satisfaction of the City of Busselton, ensuring that reciprocal rights of access are applied to all existing and proposed tenancies, excluding bays dedicated for the exclusive use of residents.		
		<ol> <li>The required number of bays is to be rounded up to the nearest whole bay where the application of concession results in a fraction of a bay.</li> </ol>		

B. SERVICE COMMERCIAL						
RESIDENTIAL	R-Code	Not Permitted				
<b>DEVELOPMENT</b> Ground Floor Residential Use			Not Permitted			
BUILDING HEIGHT	Maximum Height	2 Storeys				
BUILDING	Front	Minimum Nil				
SETBACKS			um 15m for lots fronting Warrior Co			
	6: 1		(with minor variations for architectural details)  Minimum Nil			
	Side Rear		Minimum Nil			
	Real	Minimum 1.5m for lots adjacent Ganges Lane				
			(with minor variations for architectural details)			
BUILDING	Primary Entrance	Entrar	nce to primary street mandatory			
FRONTAGE	Windows at Ground Level	Minimum glazing 50% of front façade area				
	Awnings	Minim	um depth of 2.4m for full building f	frontage to primary street		
NOISE MITIGATION		Not A	Applicable			
CAR PARKING		An automatic concession of 25% is applicable to the on-site parking requirements set out in the City of Busselton Local Planning Policy 8A for single storey development.				
		2.	The required number of bays is to where the application of concessi	be rounded up to the nearest whole bay on results in a fraction of a bay.		
C. MIXED RESIDE	ENTIAL					
RESIDENTIAL DEVELOPMENT	R-Code	R-AC4 (except where standard is specified below)				
DEVELOPMENT	Ground Floor Residential Use	Permitted				
BUILDING	Maximum Height	3 Stor	reys			
HEIGHT	Minimum Height	1 Storey. For lots with frontage to Napoleon Promenade, an equivalent 2 storey facade is required.				
		Residential		Commercial		
BUILDING	Front	As per R-Codes		Mandatory Nil setback to 90% of frontage		
SETBACKS	Side			Minimum Nil		
	Rear			Minimum Nil		
BUILDING FRONTAGE	Primary Entrance	Entrance to primary street mandatory		Tenancies with frontage to Napoleon Promenade must provide direct access to Napoleon Promenade.		
	Windows at Ground Level	Not A	pplicable	Minimum glazing for 50% of front façade area		
	Awnings	Not Applicable		Minimum depth 2.4m for full building frontage to primary street		
NOISE MITIGATION		Noise sensitive premises shall be designed to attenuate ambient noise so that sound received does not exceed the assigned levels set out in the Environmental Protection (Noise) Regulations 1997.  Where road noise is above LAeqdB 55 at the of construction, treatment packages recommended by the Vasse Newtown Dawson Village Centre Traffic Noise				
CAR PARKING		Assessment (Lloyd George, 2008) shall be implemented for residential uses.  1. An automatic concession of 10% is applicable to the on-site parking requirements set out in the City of Busselton Local Planning Policy 8A for other uses.				
		2.		Residential uses is as per the R-Codes.		



#### 5.5 **Signage Requirements**

The signage standards set out below apply to all development within the Activity Centre.\*

- 1. For Lots 104, 105 and 106, one freestanding pylon sign no greater than 6 metres in height per lot;
- 2. Other than pylon signage dealt with at 1) above, all other signage will be retained within the roof line of the building and occupy no more than 20 percent of any wall face;
- 3. Other than pylon signage dealt with at 1 (above), no pylon signs, billboards or hoardings will be permitted in the Activity Centre Plan Area, with the exception of short term estate marketing signage, which may be considered, subject to a Development Application, on a case-by-case basis in accordance with the Local Planning Scheme:
- 4. Signage must not be visually obtrusive or result in excessive visual clutter; and
- 5. Signage must not cover a large proportion of the shopfront window preventing passive surveillance.

#### 5.6 **Drive Through Facility Control Area**

A 'Drive-through Facility Control Area' and associated provisions will be included in the Scheme, for the area shown on Activity Centre Plan Map (Plan 1) and consistent with those provisions imposed pursuant to Amendment No. 29 to the City's Local Planning Scheme No. 21.

### LOCAL DEVELOPMENT PLANS

A Local Development Plan shall be prepared for land within the Mixed Residential Character Area prior to any development taking place, addressing:

- Built form considerations including lot boundary setbacks, overshadowing, visual privacy, building heights, building orientation and ancillary dwellings;
- Vehicle access and parking; 2.
- 3. Interface of residential development with the Buayanyup Drain;
- Interface with fronting roads; and 4.
- 5 Mitigation of non-residential use impacts on residential amenity.

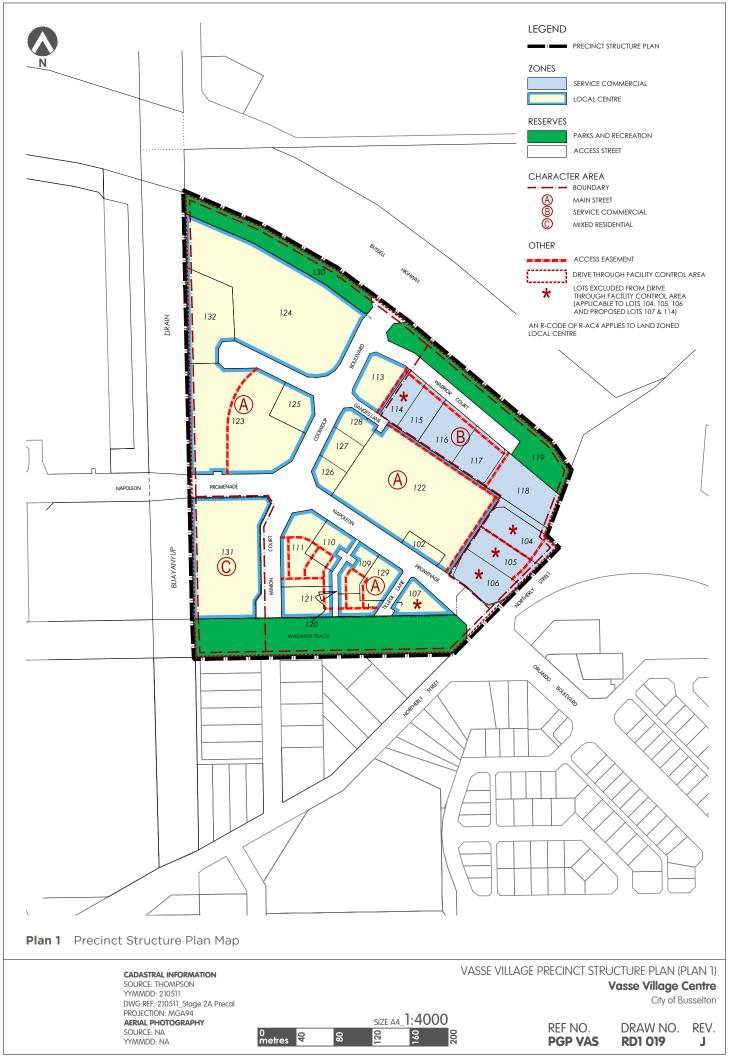
Provisions of an LDP may augment and/or vary the development standards set at Clause 4.2.3(c).

<sup>\*</sup>Signage controls per direction of City of Busselton 22nd August 2018

#### 7 **ADDITIONAL INFORMATION**

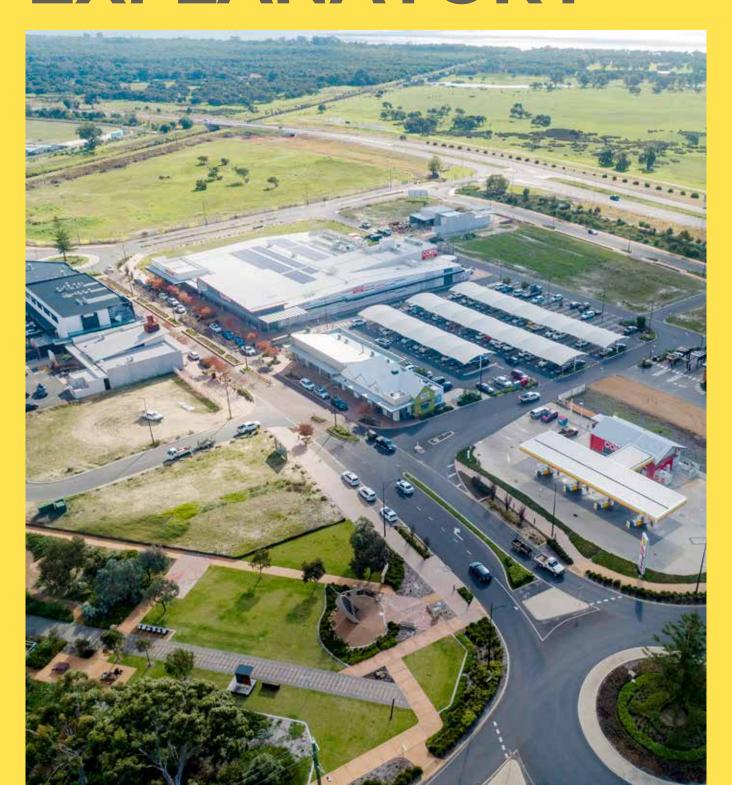
The following additional requirements are to be met in order to fulfill the objectives of the PSP.

ADDITIONAL INFORMATION	APPROVAL STAGE	CONSULTATION REQUIRED	
Mosquito Management Strategy	Condition of	City of Busselton	
Development is to be in accordance with the approved Mosquito Management Strategy for the Vasse Estate.	subdivision approval		
Landscaping Strategy	Condition of	City of Busselton	
The subdivider is to submit a Landscaping Strategy for proposed public open space areas and road reserves for approval by the City of Busselton. The approved Landscaping Strategy will be implemented by the subdivider taking into account the relevant policies of the City and ongoing management requirements and provisions of the Scheme.	subdivision approval		
<u>Urban Water Management Plan</u>	Condition of	City of Busselton	
Urban Water Management Plan prepared in accordance with the Vasse Newtown Western Catchment Drainage Nutrient and Pollutant Management Plan, taking into account the relevant policies of the City and ongoing management requirements and provisions of the Scheme.	subdivision approval		
Dust Management Plan	Condition of	City of Busselton	
The subdivider is to submit a Dust Management Plan for approval by the City of Busselton. The Dust Management Plan will be implemented by the subdivider and is to take into account the relevant policies of the City and ongoing management requirements and provisions of the Scheme.	subdivision approval		
Lot-Specific Design Guidelines	Prior to Development	In consultation with	
<ul> <li>Design guidelines shall be prepared for Lots 104, 105 and 106. Prior to the issue of development approval for these lots, the developer will prepare private Design Guidelines in consultation with the City of Busselton.</li> <li>Design guidelines will address the following:</li> <li>Integrated approach to traffic circulation and parking;</li> <li>Minimising signage, in particular pylon signage and signage above ground storey level;</li> <li>Retention of remnant vegetation (where relevant);</li> <li>Provision of safe, convenient pedestrian access; and</li> <li>Building design and materials that reflect local character.</li> </ul>	Approval	City of Busselton	





## PART 2: EXPLANATORY





### BACKGROUND

#### 1.1 **Purpose**

This Precinct Structure Plan (PSP) for the Vasse Village Centre is proposed to replace the approved Vasse Village Activity Centre Plan (ACP) as the primary planning instrument guiding development of the area.

The PSP has been prepared pursuant to the requirements of the Deemed Provisions of the Planning Regulations Amendment Regulations 2020 and with regard to State Planning Policy 7.2 - Precinct Design. The PSP provides for a mix of commercial and residential land uses and development outcomes to establish the Vasse Village Centre as the focal point for the rapidly growing Vasse region.

### Regional Context

Vasse Village is the commercial heart of the Vasse Estate, located within the City of Busselton as shown at Figure 1.

The Vasse Estate is situated approximately 60km south west of Bunbury and 250km south of Perth. Within the local context, Vasse is situated 10km west of the Busselton Town Centre, 14km east of Dunsborough and 40km north of Margaret River.

It is located at the intersection of three major arterials, being Northerly Street, Bussell Highway and the Busselton Bypass. This provides convenient access to the townsite from all regional destinations including Busselton, Margaret River, Augusta, Dunsborough and Yallingup.

#### 1.1.2 Local Context

The Village Centre is located at the heart of the Vasse Estate between the residential precincts of Birchfields and Dawson, as shown at Figure 2. Key surrounding areas and attributes include:

- The existing Vasse Hamlet is located to the south of Vasse Village, comprising 32 lots, a small number of existing businesses and public facilities including the Vasse Primary School, a community hall and a sports field;
- Birchfields residential village to the east, comprising approximately 570 residential lots
- Dawson residential village to the west, which will ultimately comprise approximately 780 lots, and includes the existing Cape Naturalise College and a future primary school;
- To the west of Dawson Village is the Vasse Light Industrial Area, containing roughly 130 industrial lots. Stage 1 is nearing completion and stage 2 is currently under construction;
- The future Armstrong Village comprising 44.41ha, and estimated to yield approximately 550 residential lots:
- The Vasse North and Vasse South Planning Investigation Areas identified in the Leeuwin Naturaliste Sub-regional Strategy; and
- The regionally significant Wadandi Track (formerly known as the Rails to Trails corridor) traverses the site from East to West to the south of Vasse Village.

Several other residential estates are also in close proximity to Vasse, including the Broadwater residential estate to the north-east and the Cambridge-Abbey residential estate to the east. These estates are discrete neighbourhoods where planning and development is well advanced.

Figure 1 Regional Context

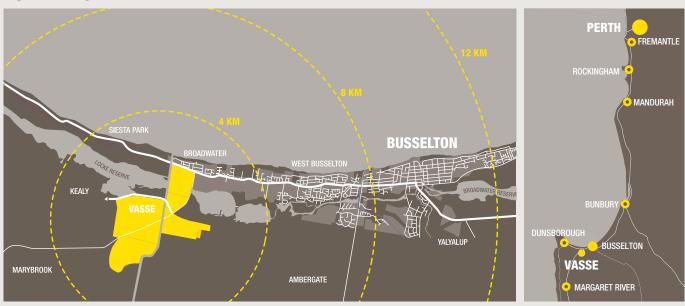


Figure 2 Local Context



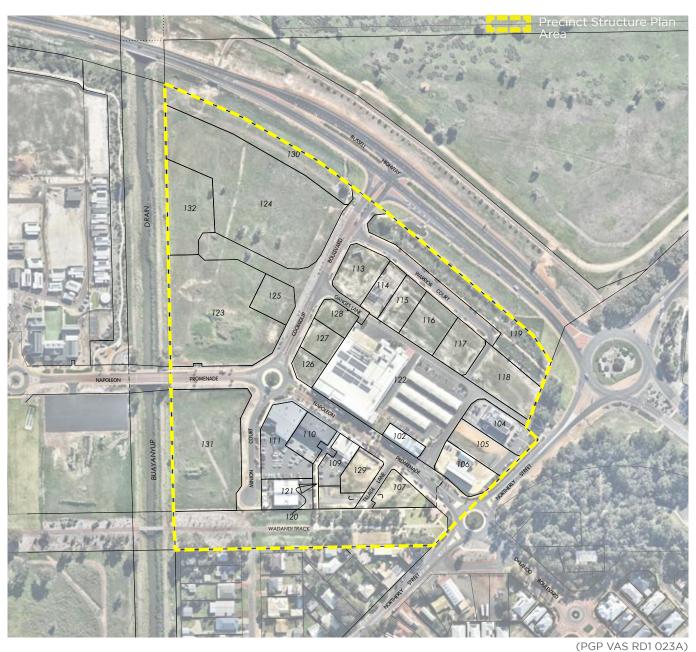


### 1.1.3 Area and Land Use

The Vasse Village has a total area of approximately 13.61 hectares, of which a substantial portion has been developed or is under construction. Development works include the creation of key public open space areas, landscaped road reserves and parking, as well as private development, comprising a Coles supermarket and service station, fast food outlets, medical centre, childcare and specialty retail tenancies.

The extent of development within the PSP area is shown at Figure 3.

Figure 3 Aerial Location Map



(PGP VAS RDI 023A

### 1.1.4 Legal Description and Ownership

The PSP area is comprised of private land, created road reserves and dedicated Public Open Space. The majority of the site is held by the various legal entities controlled by the Vasse joint venture partners, Perron Developments Pty Ltd and Stawell Pty Ltd, with several developed sites separately held in private ownership. Title details for private land contained either wholly or partly within the PSP area are summarized at Table 1.

DESCRIPTION	LEGAL AREA	REGISTERED PROPRIETOR
Lot 102 on Plan 405344		Strata Plan 73737 - Various Owners - 7 Units
Lot 104 on Plan 408157	0.226ha	McDondald's Australia Limited
Lot 105 on Plan 408157	0.1991ha	Perron Developments Pty Ltd Stawell Pty Ltd
Lot 106 on Plan 403620	0.2111ha	Quontom Pty Ltd
Lot 107 on Plan 417770	0.2381ha	Perron Developments Pty Ltd Stawell Pty Ltd
Lot 108 on Plan 405345	0.1288ha	Russell Investments (WA) Pty Ltd
Lot 109 on Plan 405344	0.1478ha	A.E. Callow Pty Ltd
Lot 110 on Plan 403620	0.3155ha	Barwon Property Funds Management Pty Ltd (Subject To Dealing)
Lot 111 on Plan 416280	0.2258ha	Perron Developments Pty Ltd Stawell Pty Ltd
Lot 113 on Plan 416280	0.1274ha	Grigg, Brent Harvey Grigg, Vanessa
Lot 115 on Plan 416280	0.3618ha	Perron Developments Pty Ltd Stawell Pty Ltd
Lot 9556 on Plan 417770	5.6988ha	Perron Developments Pty Ltd Stawell Pty Ltd
Lot 121 on Plan 405345	0.1737ha	Tunanui Pty Ltd
Lot 122 on Plan 409834	1.4368ha	AMAX & W Pty Ltd
Lot 129 on Plan 417770	0.1385ha	Garvale Pty Ltd

 Table 1
 Land Ownership Detail



### 2 VISION

The Leeuwin Naturaliste Statement of Planning Policy identifies Vasse Village as the next level of settlement below the principal centre of Busselton. While reflecting the character of the South West, it will remain distinct in scale, function and form to the Busselton Town Centre. It is not intended to duplicate or compete with the higher order facilities that exist within Busselton, but rather provide a range of commercial and civic uses to serve the daily and weekly needs of the Vasse locality.

A vision statement and supporting place values have been developed for Vasse Village, which has informed the preparation of this PSP and its ongoing development and place management. The vision is supported by an illustrative concept plan at Figure 5, which depicts the potential development outcome of the PSP area at completion. Figure 5 (and subsequent Figures 6 - 9) are for illustrative purposes only and are not intended to inform the interpretation of Part 1 provisions of this PSP or the assessment of planning applications by relevant decision-makers.



Vasse Village will be the hub of Vasse Estate and the gateway to the Margaret River region. It will offer distinctive places. interesting products and services, convenience and an inviting location to shop, relax and connect. The Village will have personality and a sense of its own history.

### **PLACE VALUES**

LOCAL	CONVENIENT	QUALITY	QUAINT	MEMORABLE
Vasse Village will become a 'home away from home' for locals - the place to meet up with friends and family any time of the day, and most importantly - reflect a real sense	The one-stop shop that is easy to get to, and around. Diverse product range, great parking - Vasse Village understands its audience - and ensures it has	Being true to the broader Vasse estate, attention to detail will continue to ensure the Vasse Village delivers a quality experience – from buildings, landscaping and	Steeped in the heritage of the area, and ingrained in its natural surrounds, Vasse Village will build on what's gone before to create an exciting future for the area	A welcoming and family-friendly atmosphere to create enjoyable experiences which entice locals and visitors, to return time and time again
of what it means to live at Vasse	what they need	good shops, through to events, community activities and friendly customer service		













Figure 4 Vasse Village



#### 2.1 **Character Areas**

Vasse Village is made up of three Character Areas characterized by distinct land use focuses and urban form, as shown at Figure 5. The establishment of these areas supports the function and legibility of Vasse Village by co-locating differing intensities of land use and built form in key areas to support a successful town centre environment focused on a Main Street and high quality pedestrian environment. Character statements for each area are described adjacent.

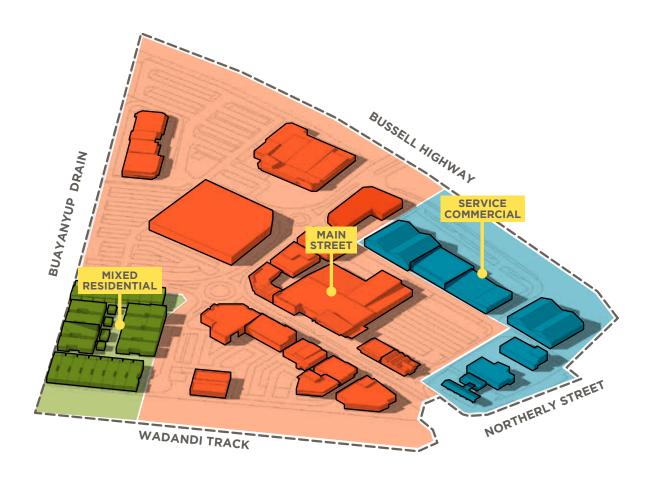


Figure 5 Character Area Diagram



### MAIN STREET

Forming the heart of the Vasse Village, the Main Street Area will incorporate the most diverse range of land uses within an immersive main street environment. An exciting mix of retail and commercial uses, ranging from a major supermarket to small specialty stores, will be accommodated in a diverse mix of individually developed commercial buildings.

Main Street's status as the heart of Vasse Village and the epicenter of pedestrian activity will be reinforced by a high quality urban realm and public art, creating a place for public life to flourish.



### SERVICE COMMERCIAL

Fronting Bussell Highway and Northerly Street, the Service Commercial area accommodates showroom, service and drive-through uses that are predominantly car-based and require high-traffic environments. The concentration of these uses within this area ensures that traffic-generating uses are situated away from the Main Street and pedestrian priority areas.

The area will provide a high-quality interface to adjacent roads with landscaping to Northerly Street and a landscaped buffer to Bussell Highway.



### **MIXED RESIDENTIAL**

The Mixed Residential area will accommodate medium density residential development suited to a town centre environment, as well as the option for appropriately scaled commercial uses. It will provide additional housing options and an urbane lifestyle choice for the area, and bring life and activity to the Village outside of trading hours.

Development of the area will enhance the Village's interface with Buayanyup Drain and bookend this part of Napoleon Promenande with high quality built form.



### 3 ACTIVITY

Vasse Village is planned to include a diverse mix of complementary and cross-supporting land-uses.

Facilities that have already been delivered at Vasse Village include a full-line supermarket, medical centre, a service station as well as a range of specialty food and beverage and retail outlets. In addition to expanding the current offering, future development is planned to include a farmers market, office development, additional health and medical services, a tavern and service commercial uses. New development will complement the existing service offer and support existing activity.

The PSP proposes a flexible approach to land-use and does not over-prescribe the distribution and location of specific uses. Land-use zoning is guided by Scheme requirements and Part 1 Development Controls of this PSP to maintain a broad palette of land-use opportunities.

The emerging mix and distribution of land uses within the centre is depicted at Figure 6.

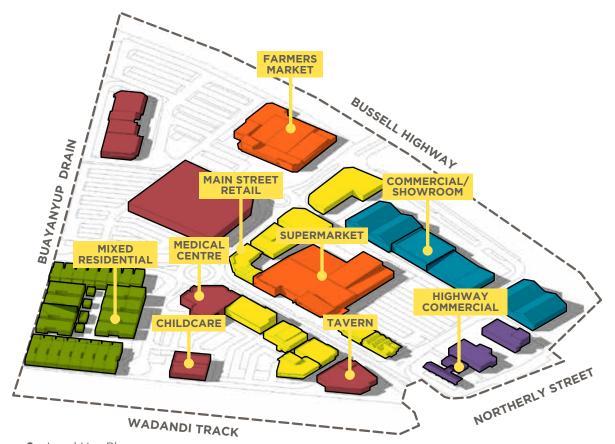


Figure 6 Land Use Plan

#### 3.1 Retail Need and Demand

The PSP area is subject to 'Special Provision Area 65' of the City of Busselton Local Planning Scheme No. 21 which specifies a recommended retail floorspace allocation of for the Village of 4,650sqm NLA. The centre currently contains approximately 3,420sqm of retail NLA, anchored by a full-line Coles supermarket and supported by a range of specialty shops.

The PSP incorporates the previously unplanned western section of the Village in which it is proposed to develop a large format Farmers Market with approximately 2,250 sqm of retail NLA, complemented by approximately 500sqm of additional retail specialty shops, within both the new and existing Main Street Character Area.

To support the variation to the recommended retail floorspace specified in the Scheme, the PSP is supported by a Retail Need and Demand Statement (Urbis, 2021) of the Busselton and Vasse market areas. This concludes that there is a demonstrable market need and demand in support of Vasse Village increasing its provision of retail NLA to 6,500sqm in the short term, and incorporating the flexibility to expand in the future in line with market demand and its role in the hierarchy.

The Report finds that te proposed scale of Vasse Village is supportable by the market recognising:

- The analysis supporting the current floorspace allocation was originally based on a 'Demand Analysis' report prepared by Syme Marmion & Co. in 2007, which has also informed the Local Commercial Planning Strategy (2011).
- 2. The latest ABS figures show that as of June 2020 there were 40,330 residents in the City of Busselton. The Syme Marmion & Co report estimated the municipality's population would reach 38,338 by 2021. This population level was achieved in 2017 and in 2020 was 5% more than the 2021 estimate.

- 3. The City's Local Planning Strategy (2019) outlines expectations for a higher growth outcome for the resident population in the City of Busselton. The 2007 demand analysis utilised a population growth rate of between 710 and 850 persons per annum. The later LPS 2019 is based on higher population projections of over 1,000 people per annum and despite the Vasse area being a key growth area there has been no change to the amount of floorspace allocated to Vasse Village.
- 4. The Vasse Village has established ahead of expectations, supported by the pace of residential development in Vasse Estate and surrounding areas as well as the development of key civic/community infrastructure (e.g. several schools, childcare centre) and provision of medical / health services in the activity centre.
- 5. The identification in the LNSRS of the Vasse North Planning Investigation Area (PIA), Vasse South PIA and Abbey (South) PIA, will have a material impact on the size of market supporting Vasse Village, and provide further basis for expansion of convenience based retail facilities at Vasse Village to ensure the centre continues to adequately serve the everyday shopping needs of its market.
- 6. The proposed expansion of retail floorspace at Vasse Village would not impact the primacy of the Busselton City Centre, recognising the scale and type of retail uses will be consistent with the centre's 'neighbourhood' designation.
- 7. The proposed expansion of retail floorspace at Vasse Village will have a range of benefits for the community including enhanced access to retail goods and services, the generation of new employment opportunities and the delivery of additional services that benefit residents and visitors.



#### 3.2 **Residential Development**

Residential development is encouraged in the Main Street and Mixed Residential Character Areas to promote a vibrant and lived-in centre.

A Residential Density Code of R-AC4 is applied to the Mixed Residential Character Area per Table 2 of the R-Codes Volume 2 - Apartments. This provides an appropriate level of development potential consistent with the proposed height and role of this part of the Village. Per Part One, Clause 6 of the PSP a Local Development Plan (LDP) is required to coordinate the development of this precinct to ensure a cohesive design response is achieved. The LDP also provides an opportunity for considered variation of the general site requirements detailed at Part One, Claus 5.4(c) where this will facilitate innovative built form outcomes that improve the liveability and attractiveness of the Centre. Apartment development is encouraged above the ground floor of the Main Street Character Are. No residential density code is allocated with development in accordance with the design controls specified in the R-Codes Volume 2 - Apartments.

### **EXISTING ACTIVITY**

















### 4 BUILT FORM

Development within Vasse Village is already substantially progressed, with completion of a Coles Supermarket, specialty stores, a Medical Centre and hospitality offerings establishing a strong foundation for further growth.

To support ongoing development, Part 1 of the PSP identifies a range of built form controls that guide the design and disposition of buildings, signage and other matters. These controls provide for a range of built form typologies intended to achieve a desired response to the streets and public spaces within the Village, based on defined Character Areas.

The Vasse Village PSP development controls reflect the following key principles:

- Achieve a core main-street environment along Napoleon Promenade defined by active and highly articulated buildings with continuous weather cover, multiple entry points to the street and a fine grain architectural form.
- b. Sleeve large-format retail with specialty tenancies to achieve a 'main street' edge.
- c. Provide for complementary development fronting lower-order roads which reflects the local vernacular architectural style.
- d. Ensure commercial and service buildings maintain an appropriate regional vernacular character to Northerly Street.
- e. Support housing diversity by encouraging residential development that is compatible with a mixed-use environment.

### **EXISTING BUILT FORM**











### 4.1 Built Form Configuration

Vasse Village is intended to accommodate a range of building typologies, including mixed use commercial buildings, large format supermarket, retail shops and civic buildings, residential dwellings and other potential typologies.

Figure 7 depicts an indicative development outcome which incorporates these diverse building types into a coherent Village environment consistent with the established Built Form key principles. This includes a core main-street environment supported by complementary development on lower order roads, with car parking and servicing generally sleeved behind development, as well as suitable interfaces to Buayanyup Drain and Busselton Highway.

### 4.2 Drive Through Facility Control Area

In order to promote an active pedestrian environment, the PSP establishes a general prohibition of 'drive through facilities' within the Centre via a 'Drive Through Facility Control Area', consistent with relevant provisions in Local Planning Scheme No. 21.

The PSP specifies four sites where drive-through facilities are considered appropriate and are therefore permitted, being proposed lots 104, 105, 106, 107 and 114.

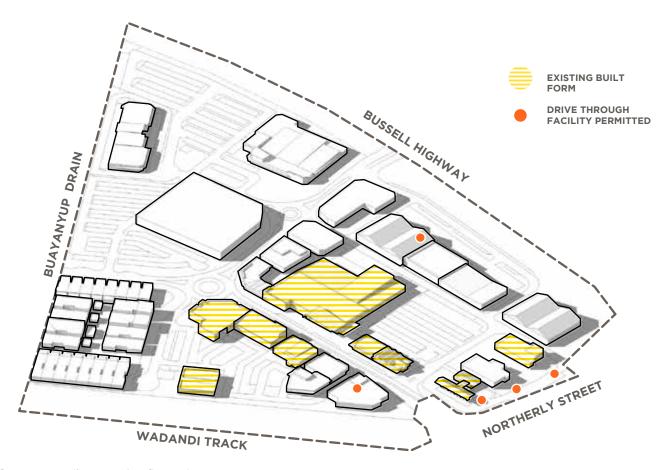


Figure 7 Built Form Configuration



### 4.3 Architectural Vernacular

The materiality and architectural form of development within Vasse Village is intended to reflect the local vernacular of the South West incorporating modern interpretation of its characteristic elements. This consistent architectural vernacular is intended to create a cohesive village feel while providing interesting and activated façades that add visual amenity and facilitate pedestrian activity. The following reference images and architectural palettes (adapted from CODA Design Guidelines, 2013) are intended to provide guidance for future developments in the Village.





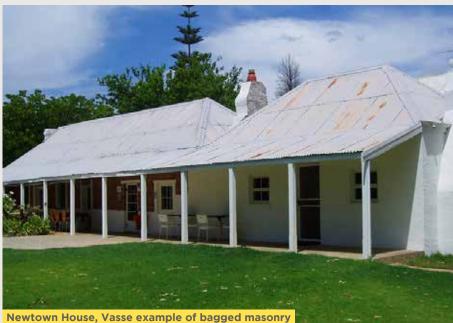




















### 5 MOVEMENT

Key elements of the Village movement network have already been delivered including Napoleon Promenade, Coomidup Boulevard and a series of supporting thoroughfares and parking areas.

The road network has been designed to accommodate all user needs, including buses and trucks along designated routes. Pavement widths and intersection treatments have been planned together with the provision for parking, pedestrians and cyclists in accordance with the following key principles:

- Clear, legible traffic connections to the residential villages by the extension of boulevards from Birchfields and Dawson and the inclusion of access from Bussell Highway;
- A hierarchical internal road network, ranging from main streets with various functions to coordinated parking areas that form a simple circulatory grid;

- c. Shared paths in the Wadandi Track corridor supported by on-street cycling;
- d. High quality pedestrian environment supported by a network of footpaths on main streets and other centre streets and shared paths. Additionally, the design provides for frequent, designated crossing points throughout the street network;
- e. Coordinated mid-block parking, linked by private thoroughfares and designated locations for easements; and
- f. Extensive on-street parking that contributes to the integrated provision of parking for all development in the Village Centre, facilitating the application of parking discretions intended to incentivise first floor development.

### **EXISTING MOVEMENT NETWORK**













### 5.1 Cyclist and Pedestrian Movement

The facilities provided for pedestrians are a major element towards successfully fulfilling the aspirations for the Village. The Village accommodates cyclist and pedestrian movement through the prioritisation of pedestrian activity along major roads including Napoleon Promenade, the creation of dedicated easements for exclusive pedestrian use and the establishment of a shared pedestrian and cyclist path within the Wadandi Track. These facilities provide an interconnected network which links the Village to surrounding residential neighbourhoods.

#### 5.2 Vehicle Movement

The initial subdivision stages for the Village Centre were approved in 2013, in line with the then Village Centre Detailed Area Plan and supported by a Transport Assessment Report prepared by Uloth and Associates in July 2013. An Addendum Report was prepared in August 2018 to support the then ACP which confirmed the overall traffic forecasts and intersection operations.

The PSP is supported by a further Addendum 2 Report which considers inclusion of the Stage 2 area and corresponding intersection operation for the affected intersections along Coomidup Boulevard. The Addendum 2 updates the previous trip generation assumptions and resulting traffic forecasts to reflect the currently proposed plans for the Village Centre, and to confirm the acceptable operation of the affected roads and intersections.

The Report confirms that the future traffic flows and intersection operations within and adjacent to the Vasse Village Centre are acceptable, with all delays below the maximum limits specified under the WAPC Transport Assessment Guidelines.

Specifically, the report finds that the existing and proposed roundabouts on Coomidup Boulevard will both operate at a high Level of Service A during the critical peak hour, indicating very good operating conditions with little or no delay. While the right turn from Coomidup Boulevard south into Bussell Highway east, will operate at an acceptable Level of Service D (indicating poor but manageable operating conditions, with long traffic delays), this is addressed within the Village Centre design by allowing for the alternative option of exiting the Village Centre via a left-turn onto Northerly Street, to then access the Bussell Highway roundabout.

### 5.3 Car Parking

A detailed assessment of car parking was undertaken to support the original ACP in consultation with the City of Busselton. The results of the assessment demonstrated that the development of the Village can achieve a reduction in car parking provision relative to current parking standards, due to reciprocal car parking opportunities arising from trip-chaining, internal trip-making and non-coincident land-use demands in the Village Centre. The results of this analysis are reflected in the Car Parking standards contained within Part 1 of this PSP, which depict Character Area based concession to standard parking rates of between 10-25%.

At the request of the City of Busselton Uloth and Associates undertook a Parking Utilisation Study in 2021 which confirmed the suitability of the current parking concessions, and by extension their continued application into the balance of the previously unplanned portion of the Village.



#### 5.4 **Thoroughfare Types**

The following thoroughfare typologies provide guidance and design standards to inform delivery of the Vasse Village movement network. Each typology includes a preferred cross section to illustrate the intended development outcome. These typologies are an explanatory guide only and do not constitute development standards or requirements additional to the provisions contained in Part 1 of this PSP.

The majority of key thoroughfares within the PSP area have been delivered, as well as key private and minor connections to car parking areas. Figure 8 demonstrates the indicative location of each thoroughfare typology. Typical widths specified reflect a general standard only and may be reduced or widened in response to site conditions.

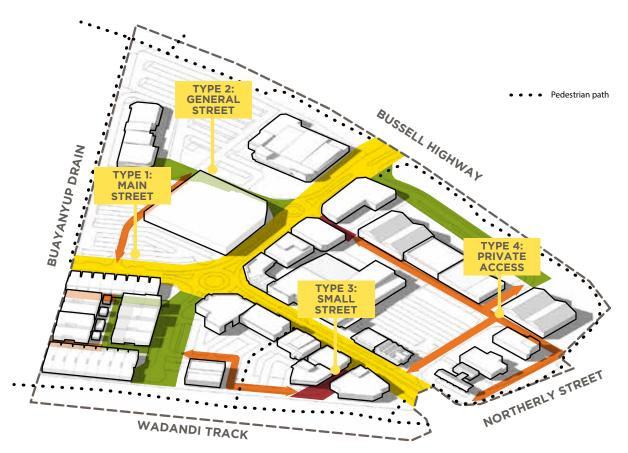


Figure 8 Thoroughfare Types

### THOROUGHFARE TYPE 1: MAIN STREET

### **Desired Character:**

- Main street boulevard with integrated traffic and high pedestrian use
- Two-way traffic flow with intended design speed of <30km/h</li>
- Pedestrian footpaths and parallel parking both sides
- Crosswalk and designated pedestrian crossings in key locations
- Hardscaping with high quality paving, street furniture and street trees



**TYPICAL WIDTH 23.0m** 

### THOROUGHFARE TYPE 2: GENERAL STREET

#### **Desired Character:**

- General street with high pedestrian access but emphasis on parking and traffic
- Two-way traffic flow with intended design speed of <30km/h</li>
- Except where adjacent to POS, footpaths and parallel parking both sides
- Varied landscaping with low planter strips



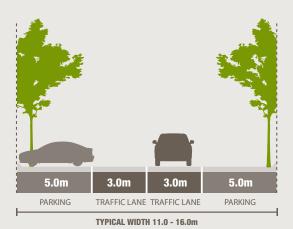
TYPICAL WIDTH 20.0m

### THOROUGHFARE TYPE 3: SMALL STREET



#### **Desired Character:**

- Short access street with integrated traffic and moderate pedestrian use
- Two-way traffic flow with intended design speed of <15km/h</li>
- Pedestrian footpath and parallel parking one side
- Varied landscaping with low planter strips



### THOROUGHFARE TYPE 4: PRIVATE ACCESS / LANEWAY



### **Desired Character:**

- Private easement or laneway primarily for vehicle use and shared pedestrian use
- Two way traffic with intended design speed of <15km/h</li>
- Generally no car parking (embayed parking where required)
- No pedestrian footpath
- Landscaping in adjoining lots and parking areas



TYPICAL WIDTH 6.0 - 10.0m



### **6 PUBLIC SPACE**

Delivery of key public space within Vasse Village is well underway, with a combination of completed and planned public spaces providing a range of experiences that accommodate a variety of user needs. Public space within the Village has been planned and designed together with streets and buildings to create an integrated urban environment which achieves the following key principles:

- An iconic and vibrant Village Green centred on the Wadandi Track where it meets Napoleon Promenade. The Green is intended to become a key community, civic and, cultural space within Vasse.
- b. Upgrade the Wadandi Track as a linear urban parkland where it interfaces with the Vasse Village Centre and the existing Vasse Hamlet.

- c. Celebrate and cultivate the Village Centre as a unique and iconic 'heart of the village' through the use of public art and landscaping treatments.
- d. Landscaping that enhances the pedestrian environment and presents a visual counterpoint to the rural environment in colour and form.

### 6.1 Public Open Space Provision

A total of 1.72 ha of green space is provided within the PSP area (equivalent to 12.64% of the site) in a variety of forms as set out at section 6.2 of this Part. This green space is excluded for the purposes of calculating the required Public Open Space contribution for the PSP area.

### **EXISTING PUBLIC SPACE**









In accordance with the requirements of Liveable Neighbourhoods, commercial and other land uses other than mixed use and residential do not require a POS contribution and are to be deducted from the total site area for the purposes of calculating overall POS contribution.

While the 0.93ha mixed use area within the PSP generates a requirement for 0.09ha of, this is accommodated within the balance of surplus POS provided across Vasse estate, which totals 24.08ha or 13.03% of site area. The mixed use area is otherwise afforded access to over 4.5ha of high quality POS within 400 metres, including the Wadandi track and the Vasse Playing Fields.

The intended distribution of public spaces within the centre is depicted at Figure 9.

#### 6.2 Public Space Types

The following public space typologies provide guidance to inform delivery of the Vasse Village public space network. Each typology includes a preferred layout plan to illustrate the intended development outcome. These typologies are an explanatory guide only and do not constitute development standards or requirements additional to the provisions contained in Part 1 of this PSP.



Figure 9 Public Space Types

#### PUBLIC SPACE TYPE 1: VILLAGE GREEN

#### **Desired Character:**

- Village threshold and multiple use space with high level of accessibility and use
- Activated edges to the north with open aspect to west and east
- Formal 'urban green' design character
- Extensive paving and soft landscaping to a high finish
- Impactful architectural features and public art



#### PUBLIC SPACE TYPE 2: LANDSCAPE BUFFER

#### **Desired Character:**

- Ornamental park and visual buffer to Bussell Highway with limited pedestrian use
- Landscaped edge and backdrop to Village
- Detention drainage function
- Landscaping including trees and understorey planting



#### PUBLIC SPACE TYPE 3: PEDESTRIAN PROMENADE

#### **Desired Character:**

- Urban pathway connecting main street to regional open space network
- Multiple use space with pedestrian priority and high accessibility
- Extensive hardscaping and street furniture including seating
- Tree planting to both sides



#### PUBLIC SPACE TYPE 4: LINEAR PARK

#### **Desired Character:**

- Open parkland with urban character
- Moderate use with district cycling and pedestrian function
- Opportunity for community garden and community uses
- Open aspect and edge conditions to facilitate access
- Landscaping to inactive edges including trees and understorey planting
- Some paving and street furniture including bike storage



## 7 RESILIENCE

The resilience and sustainability of Vasse Village will be driven by its walkable urban design and resource-efficient land use mix, which will deliver higher intensity development in close walking and cycling distance to surrounding residential communities.

The attributes outlined below highlight how Vasse Village contributes to the achievement of regional sustainability and resource conservation objectives.

Managing urban and regional growth	The south west coast of Western Australia has recently experienced unprecedented urban growth pressure. The Vasse Estate caters for a proportion of this growth in a sustainable, multifunctional and coordinated village settlement where residents enjoy proximity to a full range of facilities and services, including health, education and local employment. This will reduce pressure for ad-hoc development in other areas of the southwest with high landscape amenity and conservation value.
Sustainable urban design	The Village Centre is located within a cleared site that was formerly used for agriculture thereby avoiding the need for clearing of any areas of significant conservation value.
	The urban structuring of the Village Centre is consistent with Liveable Neighbourhoods, thereby promoting sustainable living. The location of the Village Centre relative to the surrounding residential villages makes it a walkable destination with a comprehensive suite of urban services, facilities and amenities.
Integrating land use and balanced	The village design promotes a modal shift from private motor vehicle use to walking and cycling. The layout and design of streets and parks creates safe, attractive and convenient environments for pedestrians and cyclists.
transport	The surrounding residential development ensures a sizable catchment population is located within walking distance of the amenities and opportunities available at the Village Centre.
	The street network is designed to accommodate a future bus service with bus stops located within 400 metres (five minute walk) of most residents.
Managing Freight and regional transport	Bussell Highway and the Busselton Bypass cater for the efficient and safe movement of freight and other regional transport, allowing the former Bussell Highway (now Northerly Street) to be downgraded to a neighbourhood connector in keeping with the character of adjacent development.
	The internal street network is carefully configured to discourage unrelated through traffic.
Preserving air quality	Reducing total vehicle kilometres travelled and cleaner air will be achieved through a highly interconnected street system and the promotion of walking, cycling and public transport.
	Generous parks and landscaped areas will provide green lungs for the Village.
Water	Landscape treatments requiring low water usage will be provided in the public realm.
Conservation	The approved DNPMP promotes water sensitive urban design to achieve maximum stormwater detention on-site and the removal of pollutants and nutrients from surface and groundwater discharge.
Sustainable energy	Lot layout is designed to achieve passive solar design and construction, while building design guidelines and other private agreements will encourage energy efficiency.
Building Sustainability	Building and development design guidelines, administered by the developer through covenants on title have been prepared and are being implemented to promote sustainable development.



## PLANNING FRAMEWORK

#### 8.1 City of Busselton Local Planning Scheme No. 21

The PSP area is zoned 'Urban Development' and is subject to 'Special Provision Area 65 (Vasse Village Centre)' which includes a recommended retail floorspace allocation of 4,650sqm NLA.

The Wadandi Track adjacent the southern boundary of SP65, and the open space adjacent the intersection of the Busselton Bypass and Bussell Highway, are reserved for 'Recreation'.

The Buayanyup Drain adjacent the western boundary of SP65 is reserved for 'Public - Purposes Drain'.

The adjacent portions of the Busselton Bypass and Bussell Highway are zoned 'Rural' and no zone respectively.

#### 8.2 Vasse Overall Structure Plan (2018) and Draft **Vasse Structure Plan**

The endorsed Vasse Overall Structure Plan (OSP) identifies the PSP area as the 'Vasse Village Centre Special Purpose' zone for which land use is to be in accordance with a Local Development Plan (LDP). The OSP also identifies reserves for recreation comprising the POS/drainage abutting the Busselton Bypass, the Buayanyup Drain and the Wadandi Track.

The OSP also contains a number of Planning Policy Statements that specify certain requirements to be addressed at the LDP stage, which were addressed by incorporation in the approved Vasse Village ACP.

The OSP is in the process of being superseded by the Vasse Structure Plan (VSP) which is with the Commission for final determination. The VSP does not include Vasse Village Centre, deferring planning of this area to the approved ACP and subsequently this PSP.

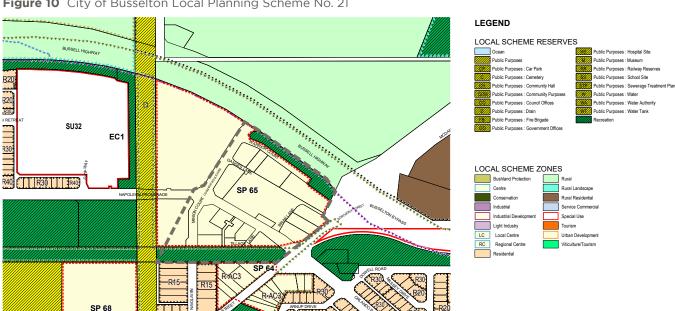


Figure 10 City of Busselton Local Planning Scheme No. 21

#### 8.3 Planning Strategies

#### **State Planning Strategies**

#### 8.3.1 State Planning Strategy 2050

The State Planning Strategy (2014) was prepared by the WAPC as a whole of Government approach to guide sustainable land use planning throughout the State up until 2050. The Strategy is aimed at developing a land use planning system to help the State achieve a number of key goals.

The Vasse Village PSP accords with the State Planning Strategy by supporting regional growth in line with a forecast doubling of the State's population, accommodated by a diverse range of well-connected and vibrant communities and regional centres that are resilient, active and respectful of cultural difference.

#### 8.3.2 Leeuwin Naturaliste Sub-regional Planning Strategy (2019)

The Leeuwin Naturaliste Sub-regional Planning Strategy (LNSPS) is an overarching strategic plan to guide the future planning and development of all the land within the Shire of Augusta-Margaret River and the City of Busselton subject to State Planning Policy 6.1 Leeuwin-Naturaliste Ridge.

The Strategy confirms Vasse as the fourth largest town in the Region, and when developed to capacity based on current zoning, will be equivalent in population to Dunsborough's current population, which is currently classified as a 'Major Town'.

The Vasse Village PSP supports the objectives of the Sub-regional Strategy by facilitating growth and development consistent with the regional settlement hierarchy, is well planned and reflects the current government positions, state planning policies and best planning practices with regard to the environment, landscape, urban design and economic development.

#### 8.3.3 South West Regional Blueprint (2014)

The South West regional blueprint is a regional strategy produced by the South West Development Commission which identifies the strategic imperatives of the region. It analyses the factors contributing to the development of the South West and presents an agenda for both the social and economic development of the region, setting out key principles to guide future growth.

The Vasse Village PSP supports the principles and objectives of the Regional Blueprint by contributing to the provision of new housing, employment, infrastructure and businesses that will be required to accommodate a future population of 500,000 people in the South West by the year 2050.

### 8.3.4 South West Regional Planning and Infrastructure Framework (WAPC, 2015)

The South West framework is a broad planning blueprint which seeks to guide the future development of the South West region over the the next 20 years. The framework provides the position of both the State Government and the WAPC in relation to the future planning of the south west, to serve as a broad guide for investment decisions.

The Framework emphasizes the growth potential of the City of Busselton, with the Vasse Estate and Vasse Village supporting the realization of the Framework's vision for greater Busselton as a hub of diversified industrial and commercial sectors, such as creative/innovative and leisure industries with centres of excellence in environmental management, sustainability and education.



#### **Local Planning Strategies**

#### 8.3.5 City of Busselton Local Planning Strategy (2019)

The Busselton Local Planning Strategy is intended to guide the long term strategic planning of the Busselton region. It sets out a Settlement Framework that is consistent with State Planning Policy 6.1 Leeuwin-Naturaliste Ridge and the South West Planning and Infrastructure Framework. The Strategy identifies Vasse together with Busselton as part of the Busselton-Vasse Urban Area. This region is identified as accommodating most of the anticipated population growth within the district, through the development of existing zoned areas and infill development in strategic locations.

The Strategy identifies Vasse as a current growth area that is 'already zoned and structure plans approved', with an approximate potential population of 5,000 people.

The Vasse Village PSP accords with the Local Planning Strategy by supporting and pro-actively planning for the urban expansion of the Busselton-Vasse Urban Area within the established urban growth framework.

#### 8.3.6 City of Busselton Local Commercial Strategy

The Busselton Local Commercial Strategy provides a broad district framework for the location of retail, commercial and industrial centres within the region. The Strategy recognizes Vasse Village as a significant commercial centre and notes that existing civic and community uses add to its significance as an activity centre.

Under the Strategy, Vasse Village is identified as a 'Neighbourhood Centre' comprising supermarkets and specialty shops with a planned future floorspace of 4,650sqm. Complementary and ancillary uses are identified as including service industry, other retail, office and entertainment. The Vasse Village PSP aligns with the direction outlined in the Local Commercial Strategy.

#### **State Planning Policies** 8.4

#### 8.4.1 State Planning Policy 6.1 Leeuwin-Naturaliste Ridge

SPP 6.1 provides the strategic planning framework for the Leeuwin-Naturalise region establishing the greater vision, guidance and land use distribution. The policy promotes sustainable development, conservation, and land and resource management. It seeks to provide assistance to those managing land use change, enable greater consistency between the two local governments, give clear regional-level advice to proponents of development, and provide a reference to guide development and conservation.

SPP 6.1 encourages Vasse to be developed as an independent and clearly defined settlement designed to be responsive to the local characteristics of the existing settlement, recommending the application of innovative building styles, landscape elements and other townscape principles to create a distinctive sense of place that is characteristic of the locality and integrated with the local environment.

The Vasse Village PSP accords with the Policy by catering for population growth consistent with the objectives of the policy as part of a new urban settlement located to enhance the region's economic, social and environmental functions, while promoting quality and innovation in urban design and built form.

#### 8.4.2 State Planning Policy 3.0: Urban Growth and Settlement

This policy sets out the principles and considerations to apply to planning for urban growth settlement in Western Australia. The policy aims to facilitate sustainable patterns of urban growth and settlement.

The Vasse Village PSP accords with the objectives of the Policy by supporting a sustainable and well planned pattern of settlement consistent with SPP 6.1 which includes a wide variety of housing, commercial, employment, recreation facilities and open space.

## 8.4.3 State Planning Policy 5.4: Road and Rail Transport Noise and Freight Considerations in Land Use

This policy seeks to address the impact of transport noise on the amenity and quality of life for residents through objectives and implementation strategies which seek to ensure that land use and transport planning are compatible. The policy establishes a standardised set of criteria to be used in the assessment of proposals affected by transport noise.

As the subject site is located adjacent to Bussell Highway, a major road within the regional road hierarchy, due regard to this policy is essential to ensure that transport noise does not adversely impact on future residents. The Vasse Village PSP accords with the requirements of the Policy and establishes Noise Attenuation standards for new development consistent with an approved Noise Management Plan (Lloyd George Acoustics, 2008).

#### **Local Planning Policies**

#### 8.4.4 Local Planning Policy No. 2.1 - CAR PARKING

This Policy is presented as a guide to the City's requirements for the provision of carparking addressing design elements, the amount of parking recommended for different land-uses as well as area specific recommendations.

The Vasse Village PSP incorporates a series of agreed variations to City's parking provisions which are intended to reduce the requirement for on-site parking provision in recognition of the Centre's pedestrian-oriented environment, and to incentivise multi-storey development through more effective use of reciprocal and surplus parking. Further discussion of car parking is provided at Section 5.3 of this Report.

### 8.4.5 Local Planning Policy No. 4.5 - BUSSELTON BYPASS ACCESS

This policy acknowledges the aim of MRWA's 'Busselton Bypass and Intersection Access Strategy' to protect the primary function of the Bypass as an inter-regional highway, and to limit access to meet this objective.

Of relevance to Vasse Village, the Policy establishes specific access considerations to the Bypass to facilitate this objective. The Vasse Village PSP meets the Policy provisions, with no further access to the Bypass beyond the Coomidup Boulevard intersection which has already been approved and constructed.

The PSP also foreshadows the Policy requirement that "subdivision and development proposals to be screened and buffered from the Bypass with appropriate acoustic bunds and landscape elements", by application of the Public Space Type 2 – Landscaped Buffer typology (see Section 6.2 of this Report) to the area adjacent the Bypass.



#### 8.5 **Pre-Lodgment Consultation**

A series of engagements with Local and State authorities have informed the development of the original ACP and this PSP, as summarised in Table 3 below.

CONSULTED PARTY	DATE	DESCRIPTION
Department of Planning, Lands and Heritage	November 2017	Correspondence with the Department to confirm the requirement for an Precinct Structure Plan in accordance with Schedule 2 Part 5, cl.31(b) of the Regulations
Department of Planning, Lands and Heritage	September 2017	Correspondence with the Department to confirm the structure and content of the PSP
City of Busselton	September 2017	Correspondence with City to confirm the need for, and the structure and content of the PSP
City of Busselton	February 2017	Correspondence with City to confirm the extent and rationale for variations to Car Parking Standards
City of BUsselton	June-August 2018	Pre-advertising modifications to PSP content including Public Open Space contribution, traffic movement and parking, noise mitigation.
City of Busselton	February - June 2021	Correspondence and meetings with the City to discuss planning process for approving development in the Stage 2A area, parking and land use options
Department of Planning, Lands and Heritage	March 2021	Correspondence with Department to provide update of preliminary discussions with City of Busselton and ensure alignment with proposed process
Department of Planning, Lands and Heritage	June 2021	Discussion with Department regarding form and content of PSP

 
 Table 2
 Vasse Village ACP / PSP pre-lodgement
 consultation

## 9 SITE CONDITIONS

The PSP has regard for key site conditions and constraints, and does not modify the approach to site conditions which has supported development of the area to date. The response to site conditions outlined below reflects the existing approach in accordance with previous approvals for the area.

#### 9.1 Biodiversity

A vegetation and flora survey was undertaken over the entire Vasse Estate (RPS, 2006) to determine the presence or otherwise of significant vegetation or flora.

The survey results indicate that the vegetation and flora has been severely impacted by the site's historical agricultural use, notably the grazing of livestock. The Vasse Village area is largely cleared of native vegetation, with no native flora species remaining except for scattered trees.

The flora survey also included a search for specially protected flora and vegetation, including Threatened Ecological Communities (TEC's), Declared Rare Flora (DRF) and Priority Flora (PF) pursuant to the provisions of the Western Australian Wildlife Conservation Act 1950, the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 and those listed by the Department of Biodiversity, Conservation and Attractions (DBCA). The survey recorded no specially protected flora or vegetation.

#### 9.2 Landform

The Vasse Village area is generally flat and low lying with a fall of approximately 1 metre across the site. The site consists of pale and olive-yellow sands derived from Tamala Limestone. The soils of the site comprise sands of varying depths to a maximum of 1.80 metres below the natural surface.

Testing of soils for acid sulfate was carried out to DBCA specifications as part of the development of the Birchfields residential village. This involved limited sampling of the remainder of the Vasse project area. On the basis of these sampling results the DBCA agreed that future development within the Vasse project area will be self-regulated.

Whilst the Vasse Village area is predominantly a low risk area for Acid Sulfate Soils (ASS), there is the potential for ASS in clays deeper than 2m below ground surface. There is the expectation that development excavation will aim to avoid depths greater than 2 metres, as well as clay soil areas. Should excavation exceed 2 metres or affect clay soils, the onus is on the developer to manage the issue through appropriate ASS testing and management (if required).



#### 9.3 Hydrology

The subject area has varying depths to AAMGL of between 0.4 metres and 1.5 metres. Surface rainfall runoff is considered to flow to the north as part of the Broadwater catchment area.

The Vasse Village Centre is included in the Vasse Newtown Western Catchment Drainage Nutrient and Pollutant Management Plan (DNPMP) approved by the Department of Water on the 30th October 2006.

Although outside of the PSP Area, it is noted that Vasse Village abuts the Buayanyup drain to the west, a key part of the district agricultural drainage system. The drain was constructed in the early 1900's and is flanked by levees which serve to contain significant flood events. Existing ground levels are marginally higher than the 100 year flood level within the drain. As such breakout from levee bank failure is not an impediment to development as filling of the Village Centre site will negate such risks. Levee banks adjacent to the existing Vasse Hamlet are to be engineered to prevent any breakout from storm events up to the 100 year event.

Local Drainage for the Village Centre includes subsurface drainage pipes installed to cater for the one in five year event, with overland flow paths to cater for the 100 year event. This drainage philosophy has been accepted by the Department of Water as part of the approved DNPMP and ongoing development of Vasse Village.

#### **Bushfire Hazard** 9.4

The WA State Map of Bush Fire Prone Areas was last updated in April 2019 and designates a portion of the Vasse Village PSP Area as bushfire prone. Accordingly, bushfire assessment and reporting is required to accompany planning applications within the PSP Area in accordance with Schedule 2 Part 10A of the Regulations, Policy Measures 6.2 and 6.3 of State Planning Policy 3.7 Planning in Bushfire Prone Areas, as well as the supporting Guidelines for Planning in Bushfire Prone Areas. A Bushfire Management Plan addressing these requirements has been prepared to accompany the Vasse Village PSP demonstrating that the necessary bushfire management compliance can be readily achieved.

#### 9.5 Heritage

The Aboriginal Sites Register was searched in February 2005 and confirmed that there are no Registered Aboriginal Heritage Sites within the Estate, including the Vasse Village area. With respect to European heritage, a search of the Heritage Council of Western Australia's heritage database confirms that there are no listed heritage sites within the PSP area.

#### 9.6 Contamination

An assessment of the potential for contamination arising from past land use within the PSP area was conducted as part of a wider investigation at Vasse. No Organochlorine pesticides, dieldrin and DDT or its derivatives were detected that approached the Department of Water and Environmental Regulation (DWER) Health Investigation Levels for residential land use. Furthermore, the investigations did not identify groundwater contamination relating to the contaminants of concern but identified nutrient concentrations consistent with the general catchment.

Redevelopment of the site for the proposed land use is therefore acceptable and chemical residues in the soil are extremely unlikely to result in adverse health effects for future land users or receptors. On this basis, there is requirement for further investigation or remediation work, or restrictions to be applied in relation to redevelopment of the land for urban purposes.

#### 9.7 Noise

The PSP area is subject to traffic noise emanating from Bussell Highway. A noise assessment undertaken by Lloyd George Acoustics (2008) was undertaken to assist in the determination of appropriate acoustic buffer separations between the Bussell Highway and noise-sensitive development. The results of this assessment show that Vasse Village satisfies the Main Roads' Noise Level "Target" Criterion providing that commercial buildings are constructed between residential blocks and the road. Should the commercial buildings not be built, the Roads' Noise Level "Limit" Criterion is achieved and facade treatments would be required to ensure acceptable internal noise levels. The noise level to the commercial buildings is considered to be acceptable.

#### 9.8 Services

Water and gas trunk mains exist along Northerly Street and servicing of the Vasse Village precinct has been progressed in line with development of the area, with services being extended as lateral connections from the north and west.

In line with current development, sewer disposal is via a gravity system to the pump station on the northern side of Bussell Highway.

Reticulation within the Village has been undertaken via traditional high and low voltage underground power mains with transformers as required. Fibre Optics have also been extended through the area from existing Telstra infrastructure located in Northerly Street.



## 10 CONCLUSION

This PSP provides the planning framework for the continued subdivision and development of the Vasse Village, updating the approved Activity Centre Plan in line with the Regulations.

The PSP reflects and maintains key aspects of the original ACP, including a careful response to site and contextual considerations, compliance with local and regional planning strategies and policies, and an integrated suite of land use and development controls supported by detailed consideration of built form, public space, movement and activity outcomes. Overall, the PSP provides a robust basis for the continued growth of a sustainable community at Vasse Village as the heart of the Vasse area.





## PART 3 TECHNICAL APPENDICES

# APPENDIX A TRAFFIC ASSESSMENT

## Vasse Village Centre

TRANSPORT ASSESSMENT REPORT - ADDENDUM 2 (FOR REVISED STAGE 2 DEVELOPMENT PLAN)



10 June 2021

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#### 1. INTRODUCTION AND BACKGROUND

The initial subdivision stages for the Vasse Village Centre were approved in 2013, supported by an overall Concept Plan for the Centre and a Transport Assessment Report prepared by Uloth and Associates in July 2013. An addendum Report was then prepared in August 2018, to address modifications to the initial plan, and to confirm the overall traffic forecasts and intersection operations.

It is now proposed to proceed with Stage 2 of the Village Centre, and the proposed new subdivision plan includes further modifications to the previously assumed land uses and Stage 2 access arrangements.

Uloth and Associates has therefore been appointed to prepare this Addendum 2 Report, to further update the overall traffic forecasts at the Village Centre, together with the corresponding intersection operational analyses for the affected intersections along Coomidup Boulevard.

#### 1.1 BACKGROUND INFORMATION AND PREVIOUS TRAFFIC STUDIES

The Development Guide Plan (DGP) for the proposed Vasse Newtown Development was initially approved in 2007, based on initial assumptions for the proposed land use together with traffic modelling to determine the future traffic flows and access / road requirements. The DGP was then updated in 2009 and after the lodgement of a number of subdivision applications for the Vasse Village Centre in 2013 a Transport Assessment Report was prepared (July 2013), taking into account the current staging for the proposed overall land use and the recommended road layout on Bussell Highway (now Northerly Street) adjacent to the Centre.

After a series of negotiations between Main Roads WA and the developer, agreement was reached regarding the construction of the Vasse Bypass road (now renamed Bussell Highway). This included a decision to construct Stage 1 of the Bypass to the Western Link Road, rather than utilise a temporary alignment along the North-South Industrial Road (now Lynwood Street). Additional work was therefore carried out in June 2014 to determine the future traffic flows along the Vasse Bypass, and along Northerly Street to Napoleon Promenade, in order to confirm that the proposed intersection designs could accommodate the full development of the overall Development Guide Plan. The future traffic flows were then also extended to include both Lynwood Street and Northerly Street (up to Kaloorup Road).

As a result of the various changes to the overall road network, Roberts Day updated the Vasse Newtown Development Guide Plan in 2015, together with a new Detailed Area Plan for the proposed Dawson Village. Future traffic forecasts for the full development of the Village Centre and the overall Vasse Development Guide Plan were therefore updated and a new Transport Assessment Report was prepared (in August 2015) to document the updated future traffic flows on the surrounding road network, and to confirm the road network modifications and resulting road hierarchy for the proposed Dawson Village.

The Addendum to the Transport Assessment Report was then prepared (in August 2018) to address minor modifications to the initial plan for Vasse Village Centre, and to confirm the overall traffic operations for the revised plan.

#### 1.2 <u>STUDY OBJECTIVES</u>

The overall objective of this Addendum 2 report is to update the previous trip generation assumptions and resulting traffic forecasts to reflect the currently proposed plans for Stage 2 of the Village Centre, and to confirm the acceptable operation of the affected roads and intersections.

#### 2. EXISTING SITUATION AND PROPOSED OVERALL DEVELOPMENT

The existing situation in the vicinity of the Vasse Village Centre is shown in the aerial photo in Figure 1. It can be seen that the initial stage of the Village Centre has already been constructed, including the main Shopping Centre building, some speciality shops and office developments, a petrol station and a fast food outlet, as well as all adjacent roads including Napoleon Promenade and Coomidup Boulevard. The remaining development areas are also indicated in Figure 1, identified as Stage 2A (on the north-west side of Coomidup Boulevard) and Stage 2B (on the southern side of Napoleon Promenade).

The subdivision plan for the proposed Stage 2A development is shown in Figure 2, including a new culde-sac road opposite Ganges Lane plus the creation of Lots 123 to 127. The future Stage 2B development will later occur on the land identified as 'Balance of Lot 51', located on the south-western corner of Napoleon Promenade and Minion Court.

Table 1 shows the updated land use data for the overall Village Centre, taking into account the already constructed components and the currently proposed Subdivision Plan together with the currently proposed Stage 2 developments. The estimated traffic generation for the fully developed Centre is also shown, identifying a slightly increased total of 25,220 vehicles per day (compared to 23,380 vehicles per day in the August 2018 assessment). It is also important to note, however, that after accounting for internal (linked) trips within the overall Village Centre, the number of external vehicle trips generated by the Village Centre has also increased slightly to 19,490 vehicles per day (compared to 18,250 vehicles per day in the August 2018 report).

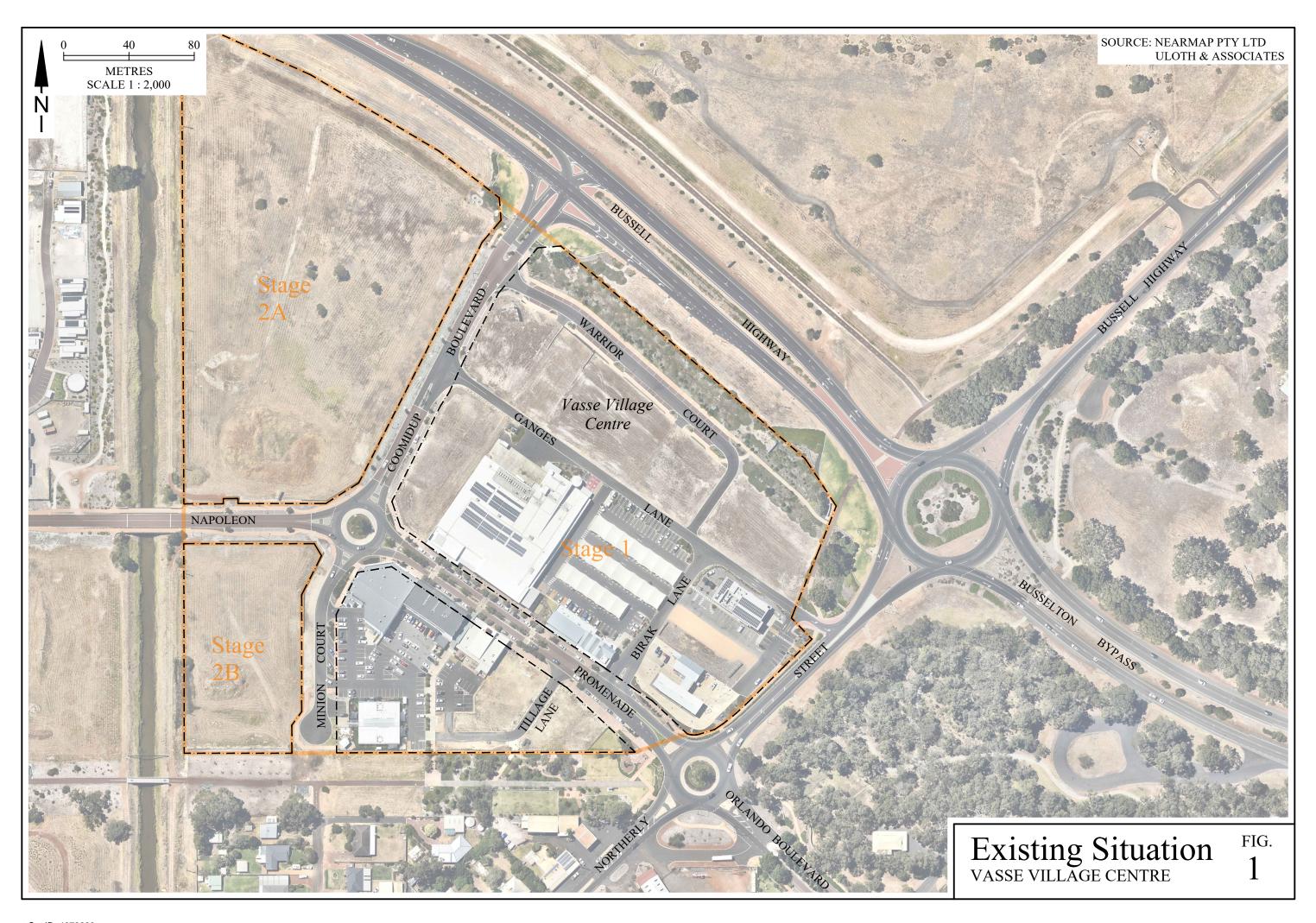
TABLE 1
PROPOSED LAND USE AND ESTIMATED TRIP GENERATION
VASSE VILLAGE CENTRE

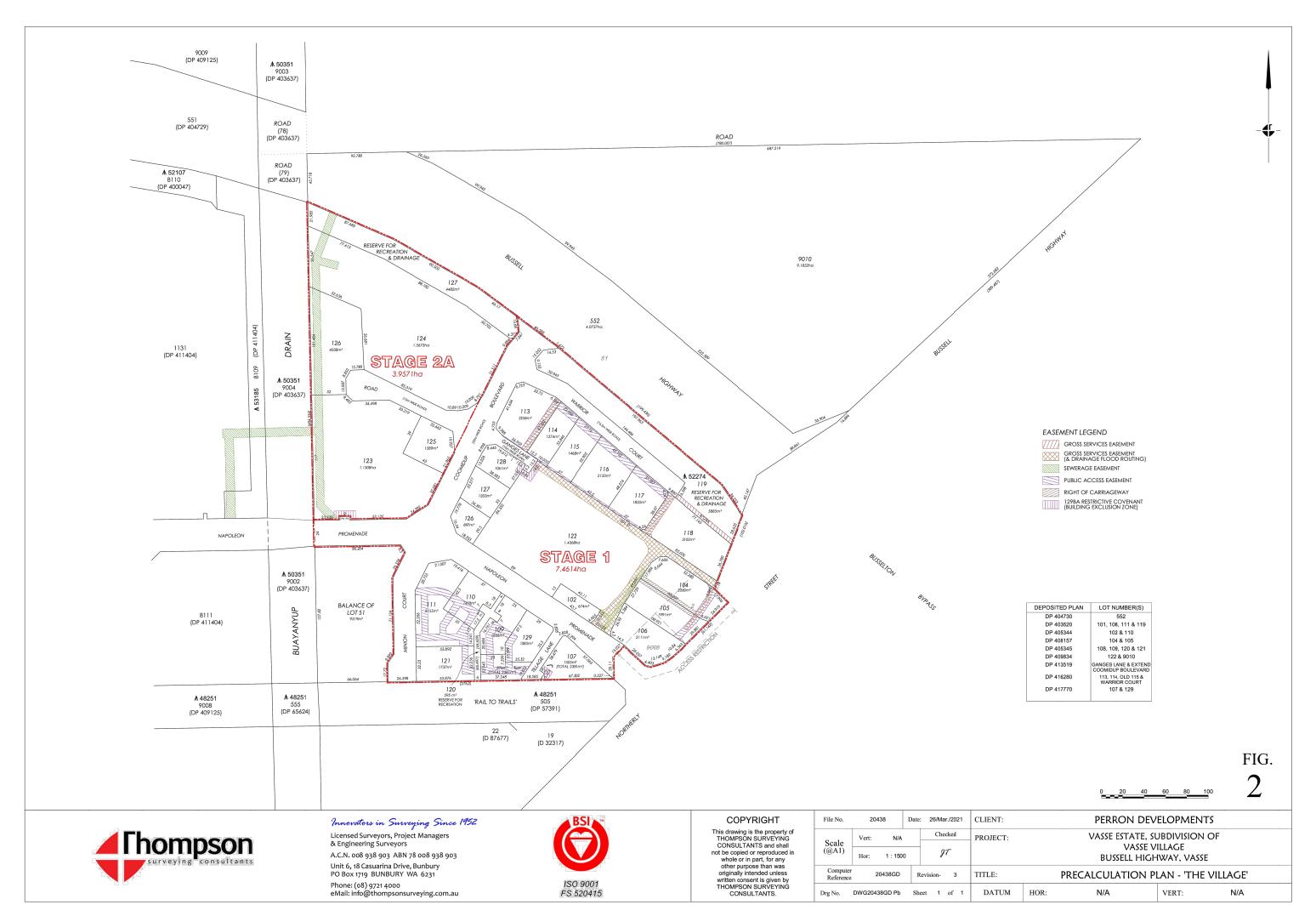
	TRIP GENERATION		
	AM Peak	PM Peak	Weekday
LAND USE DATA	Hour (vph)	Hour (vph)	(vpd)
• Stage 1	1.45	527	5 100
- Shopping Centre (4,287 m <sup>2</sup> ) <sup>1)</sup>	145 452	527 452	5,190
- Fast Food (900 m <sup>2</sup> ) <sup>2)</sup>	80	106	4,800
<ul> <li>Petrol Station (8 pumps) <sup>3)</sup></li> <li>Office (1,714 m<sup>2</sup>) <sup>4)</sup></li> </ul>	34	33	1,300 170
	36	130	
- Speciality (2,339 m <sup>2</sup> ) <sup>5)</sup> - Showrooms (5,970 m <sup>2</sup> ) <sup>6)</sup>	87	322	1,300
1 1 1 1 700 2 7)			3,280 390
- Medical (1,709 m²) 77 - Childcare (70 children, 380 m²) 89	0 34	63 34	240
- Childcare (70 children, 380 m <sup>-</sup> ) <sup>-</sup> - Tavern (785 m <sup>2</sup> ) <sup>9)</sup>	0	131	
- Tavern (783 m²) 37	U	131	1,310
<ul> <li>Stage 2A</li> <li>Farmers Market (3,400 m²) 10</li> <li>Mixed Use (2,150 m²) 50</li> <li>Medical (5,000 m²) 70</li> </ul>	115 33 0	418 120 278	4,120 1,190 1,690
Stage 2B     Residential Apartments (36 units) 10)	18	36	240
Total Trip Generation	1,034	2,650	25,220
Less Internal (Linked) Trips within the Village Centre	- 235	- 600	- 5,730
Total External Trips	799	2,050	19,490

Notes:

- 1) Based on NSW RMS rates for 'Shopping Centres'.
- 2) Based on ITE Trip Generation for 'Fast Food with Drive-Through (#934)'.
- 3) Based on ITE Trip Generation for 'Service Station with Convenience Market (#945)'.
- 4) Based on NSW RMS rates for 'Office and Commercial'.
- 5) Based on NSW RMS rates for 'Specialty Shops'.
- 6) Based on ITE Trip Generation for 'Hardware/Paint Store (#861)'.
- 7) Based on ITE Trip Generation for 'Clinic (#630)'.
- 8) Based on previous surveys and available research.
- 9) From previous studies.
- 10) Based on ITE Trip Generation for 'Low Rise Apartments (#221)'.

Source: Uloth and Associates, May 2021





#### 3. FUTURE TRAFFIC FLOWS AND INTERSECTION OPERATIONAL ANALYSIS

Figure 3 shows the distribution of future daily external traffic flows generated by the overall Village Centre onto the surrounding road network on the basis of the updated trip generation of 25,220 vehicle trips per day, using the external distribution previously identified within the August 2015 and August 2018 reports, noting that an estimated 5,730 vehicles per day are linked trips between various different parts of the Centre, leaving 19,490 vehicles per day of external traffic (as shown above in Table 1). Figure 4 then shows the resulting long term total daily traffic flows on the roads and intersections immediately adjacent to the Village Centre (following full development of the overall Development Guide Plan, while the corresponding PM peak hour traffic flows are as shown in Figure 5.

In order to confirm the acceptable operation of the modified road network immediately adjacent to the proposed Stage 2 development, Tables 2, 3 and 4 show the critical long term PM peak hour intersection operational (SIDRA) outputs for the existing Coomidup Boulevard junction with Bussell Highway, the existing roundabout at Napoleon Promenade - Coomidup Boulevard - Minion Court, and the proposed roundabout at the new Road A intersection with Coomidup Boulevard - Ganges Lane.

It can be seen in Table 2 that the Bussell Highway - Coomidup Boulevard junction will operate at a high Level of Service A during the long term PM peak hour (indicating very good operating conditions with little or no delay), except for the right turn from Coomidup Boulevard south into Bussell Highway east, which will operate at an acceptable Level of Service D (indicating poor but manageable operating conditions, with long traffic delays).

Tables 3 and 4 then show that the existing and proposed roundabouts on Coomidup Boulevard will also both operate at a high Level of Service A during the critical peak hour.

It is also noted that with the right turn out of Coomidup Boulevard into Bussell Highway operating at Level of Service D, traffic will have the alternative option of exiting the Village Centre (using Napoleon Promenade or Driveway 1) via a left-turn onto Northerly Street, to then access the Bussell Highway roundabout.

• It is therefore confirmed that the future traffic flows and intersection operations within and adjacent to the Vasse Village Centre are acceptable (with all delays below the maximum limits specified under the WAPC Transport Assessment Guidelines).

TABLE 2
OPERATIONAL CHARACTERISTICS FOR UNSIGNALISED BUSSELL HIGHWAY COOMIDUP BOULEVARD JUNCTION – LONG TERM PM PEAK HOUR
WITH FULL DEVELOPMENT OF THE VASSE DEVELOPMENT GUIDE PLAN

	OPERATIONAL CHARACTERISTICS					
ITEMS	PM Peak Hour					
No. of Approach						
Lanes: NESW			- 3	2 3		
Max X Value			0.6	521		
			M	ax.	Avrge	Level
	Move-	Х-	Qu	eue	Delay	of
Approach	ment	Value	Veh.	Metres	(sec)	Serv.
Bussell Highway	L	0.174	0.3	2	6.0	A
- east	T	0.245	0.0	0	0.1	A
	T	0.245	0.0	0	0.1	A
Coomidup Boulevard	L	0.090	0.1	1	7.3	A
- south	R	<u>0.621</u>	1.3	10	33.8	D
Bussell Highway	T	0.210	0.0	0	0.1	A
- west	T	0.210	0.0	0	0.1	A
	R	0.053	0.0	0	5.5	A

Notes: Level of Service calculations are based on Average Delay.

Underlined X-values denote maximum values.

Source: Uloth and Associates

TABLE 3
OPERATIONAL CHARACTERISTICS FOR NAPOLEON PROMENADE - COOMIDUP BOULEVARD - MINION COURT ROUNDABOUT – LONG TERM PM PEAK HOUR WITH FULL DEVELOPMENT OF THE VASSE DEVELOPMENT GUIDE PLAN

	OPERATIONAL CHARACTERISTICS						
ITEMS	PM Peak Hour						
No. of Approach							
Lanes: NESW			1 1	11			
Max X Value			0.	196			
Avrge Delay (sec)			5	5.1			
Level of Service				A			
			Ma	ax.	Avrge	Level	
	Move-	Х-	Qu	Queue		of	
Approach	ment	Value	Veh.	m	(sec)	Serv.	
Coomidup Blvd - north	LTR	0.196	1.0	7	4.1	A	
Napoleon Prom - east	LTR	0.182	0.9	6	6.3	A	
Minion Ct - south	LTR	0.046	0.2	2	6.5	A	
Napoleon Prom -west	LTR	0.074	0.3	2	4.2	A	

Notes: Level of Service calculations are based on Average Delay.

Underlined X-values denote maximum values.

Source: Uloth and Associates

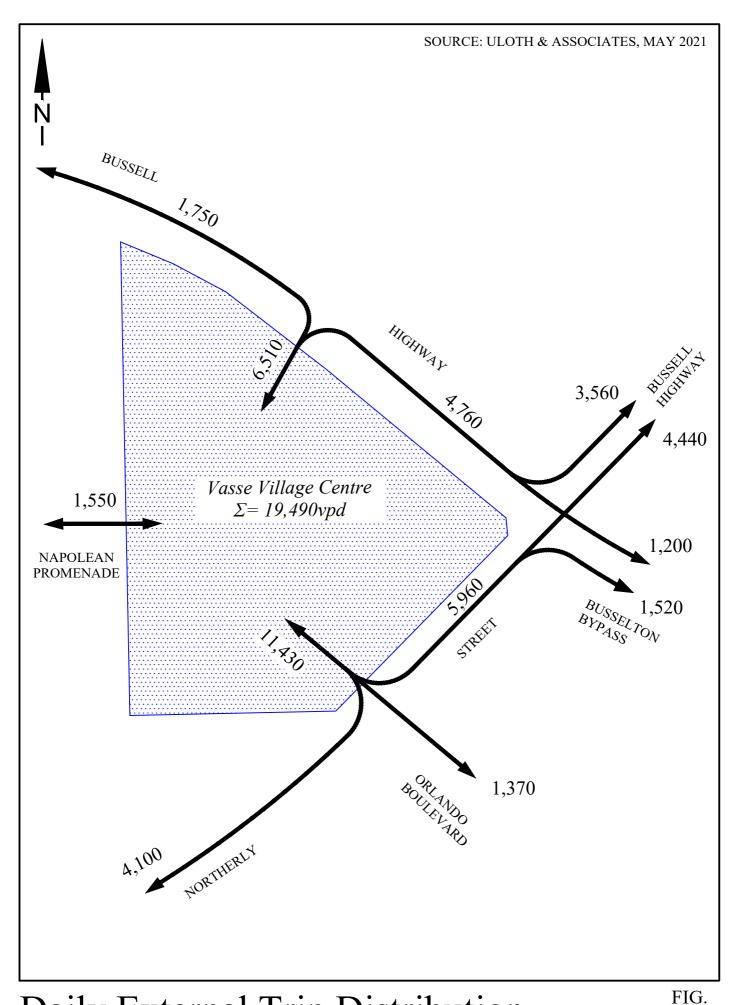
TABLE 4
OPERATIONAL CHARACTERISTICS FOR PROPOSED COOMIDUP BOULEVARD GANGES LANE - ROAD A ROUNDABOUT – LONG TERM PM PEAK HOUR
WITH FULL DEVELOPMENT OF THE VASSE DEVELOPMENT GUIDE PLAN

	OPERATIONAL CHARACTERISTICS					
ITEMS	PM Peak Hour					
No. of Approach						
Lanes: NESW			1 1	1 1		
Max X Value	0.392					
			M	ax.	Avrge	Level
	Move-	Х-	Qu	eue	Delay	of
Approach	ment	Value	Veh.	Metres	(sec)	Serv.
Coomidup Boulevard	LTR	0.329	2.1	15	7.0	A
- north						
Ganges Lane	LTR	0.234	1.6	11	8.6	A
- east						
Coomidup Boulevard	LTR	0.251	1.6	12	6.3	A
- south						
Road A	LTR	0.392	3.2	22	6.6	A
- west						

Notes: Level of Service calculations are based on Average Delay and Degree of Saturation.

Underlined X-values denote maximum values.

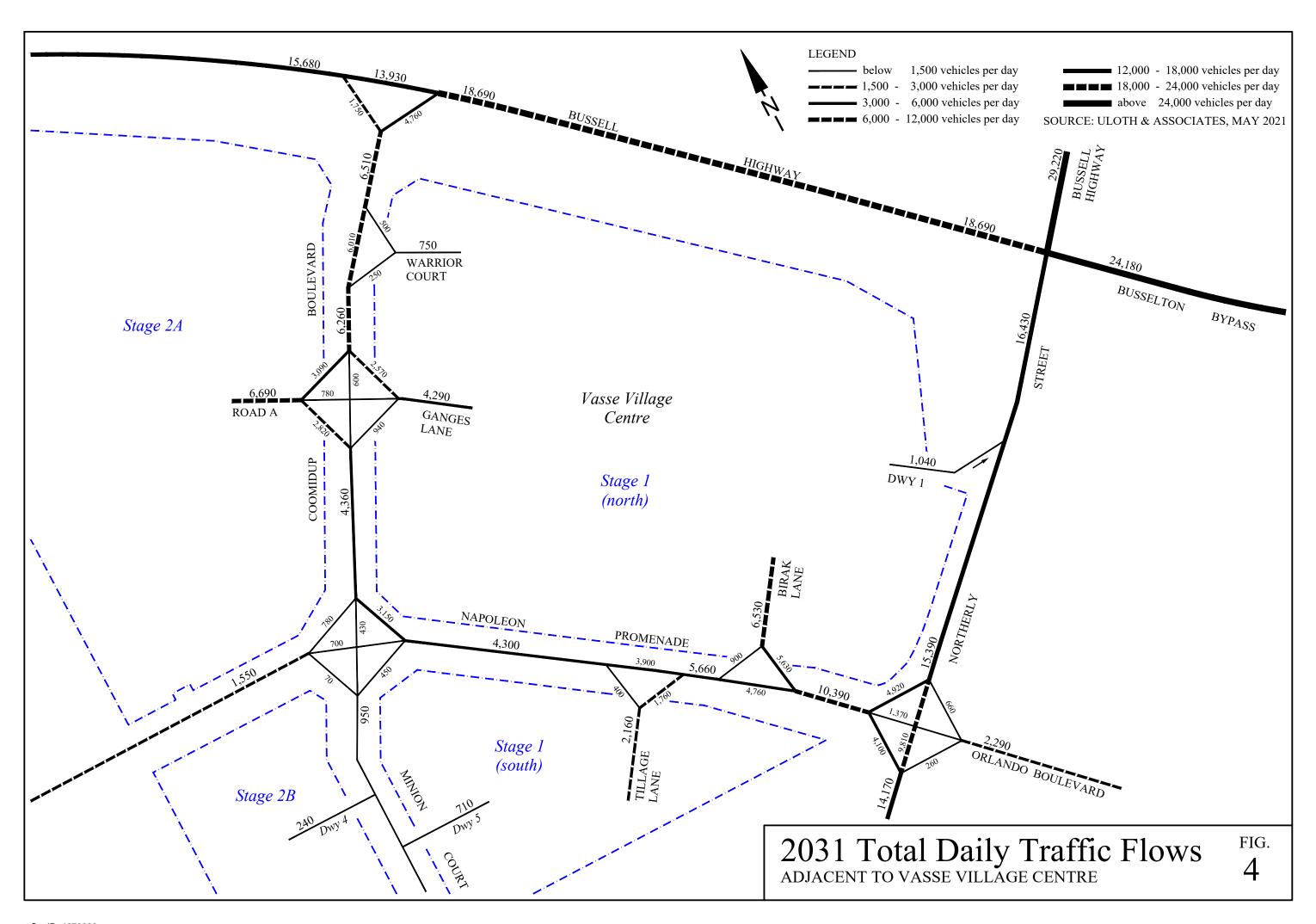
Source: Uloth and Associates

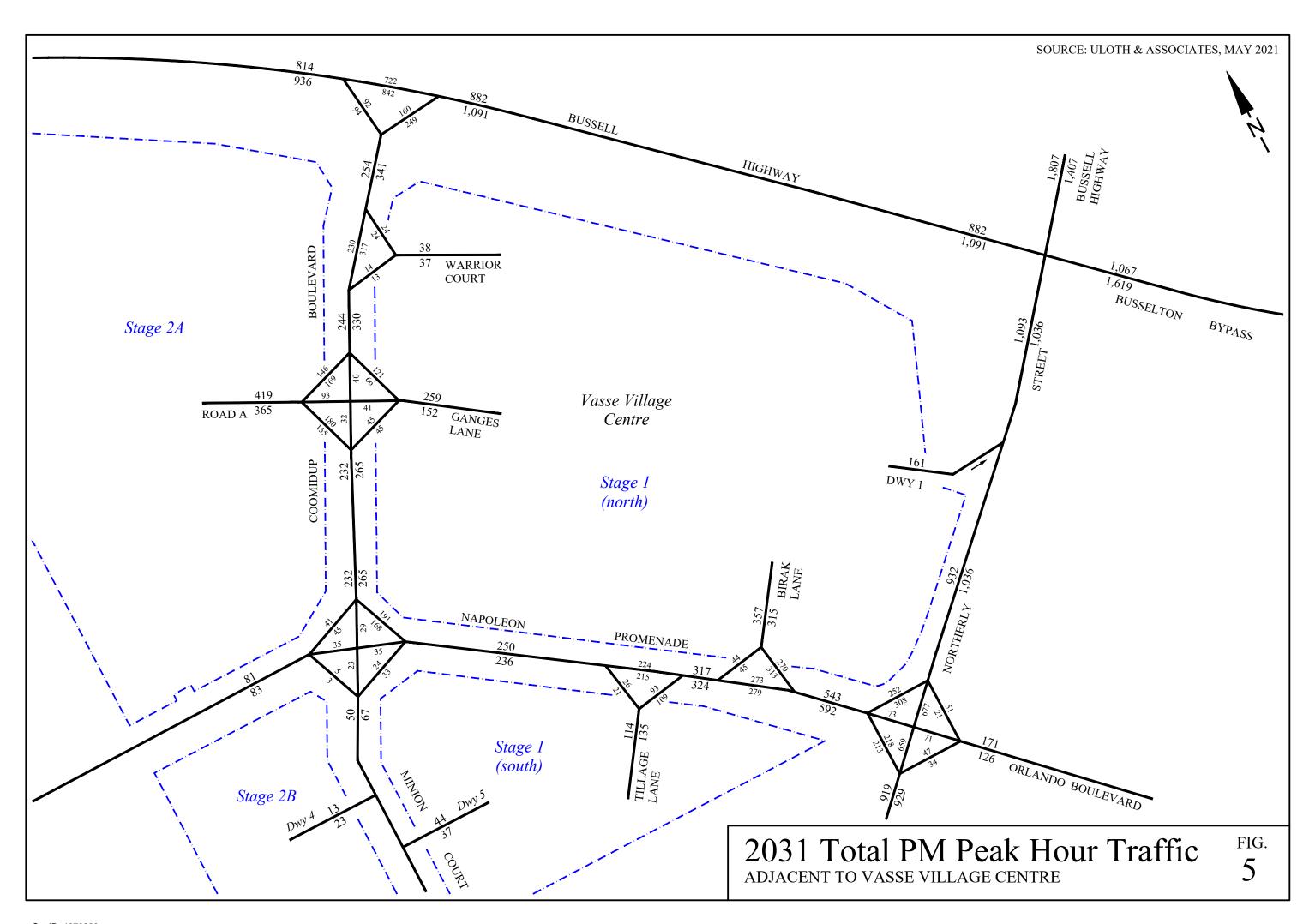


Daily External Trip Distribution

VASSE VILLAGE CENTRE - WITH UPDATED STAGE 2 DEVELOPMENT

3





## APPENDIX B NOISE ASSESSMENT

## **Traffic Noise Assessment**

## Vasse Newtown Dawson Village Centre

**Prepared for** 

Roberts Day

**June 2008** 



Reference: 8051004-01

Report: 8051004-01

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This report has been prepared in accordance with the scope of services described in the contract or agreement between Lloyd George Acoustics Pty Ltd and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client, and Lloyd George Acoustics Pty Ltd accepts no responsibility for its use by other parties.

Approved for Issue:	Daniel Lloyd
Position:	Project Director
Verified	Terry George
Date:	10 June 2008

Document Set ID: 4672228 Version: 1, Version Date: 26/07/2021

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3	METHODOLOGY	2		
	3.1.1 Ground Topography, Road Design & Cadastral Data	2		
	3.1.2 Traffic Data	2		
	3.1.3 Ground Attenuation	4		
4	CRITERIA	4		
5	RESULTS	4		
6	CONCLUSION	5		

#### 1 INTRODUCTION

Dawson Village Centre is a mixed-use residential/commercial zone within Vasse Newtown development in Busselton, Western Australia. Traffic noise from the proposed extension to the Busselton Bypass to the north of the development has been considered in this assessment.

This study determines the expected traffic noise levels from the proposed road to the mixeduse lots, compares the predicted noise levels against traffic noise criteria and where appropriate, provides detailed noise control options.

Determination of the impact and subsequent noise control recommendations have been based on the criteria prescribed within the Main Roads' *Noise Level Criteria*.

#### 2 DEFINITIONS

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

#### a Decibel

The decibel (dB) describes the sound pressure level of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

#### b A-Weighting

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

#### c $L_{Aeq}$

The LAeq level represents the A-weighted average noise energy during a measurement period.

#### d L<sub>Aeq,16hour</sub>

The  $L_{Aeq,16hour}$  level is the logarithmic average of the hourly  $L_{Aeq}$  levels from 6.00 am to 10.00 pm on the same day. This value is described as the  $L_{Aeq(daytime)}$  level.

#### e L<sub>Aeq,8hour</sub>

The  $L_{Aeq,8hour}$  level is the logarithmic average of the hourly  $L_{Aeq}$  levels from 10.00 pm to 6.00 am on the same day. This value is often described as the  $L_{Aeq(night-time)}$  level.

Reference: 8051004-01.doc Page 1

#### 3 METHODOLOGY

To predict the future traffic noise levels and determine noise control requirements, the computer programme *SoundPLAN 6.5* was utilised incorporating the *Calculation of Road Traffic Noise* (CoRTN) algorithms. An adjustment of –1.7 dB has been applied to the predicted levels based on the findings of *An Evaluation of the U.K. DoE Traffic Noise Prediction*; Australian Road Research Board, Report 122 ARRB – NAASRA Planning Group 1982.

Predictions are made at a height of 1.4 metres above ground floor level and at 1.0 metre from the building facade. In line with standard prediction methodology undertaken in Western Australia, the noise above the ground floor, particularly for two storey premises has not been considered.

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

#### 3.1.1 Ground Topography, Road Design & Cadastral Data

Noise modelling is 3-dimensional so that landmarks such as hills and cuttings are taken into account. The modelling assumes houses will be at finished lot ground level.

In line with standard CoRTN procedure, the traffic source is assumed to be 3.5 metres from the edge of the road. Where the road has a positive gradient, a noise correction is applied to reflect increased noise levels as vehicles travel uphill. From the edge of the road to the road reserve, the model interpolates the ground topography.

#### 3.1.2 Traffic Data

In determining the future traffic volumes, the MRWA 2011, 2021 and 2031 projected volumes were examined and compared to the traffic model developed by Cardno BSD. In summary, the Cardno BSD traffic model uses estimated 2015 regional traffic movements with the addition of a maximum level of land use development within the Vasse Township. This is believed to be a very conservative approach as the projected Cardno BSD volumes on the bypass are higher than the MRWA 2031 projections.

It is likely that night-time volumes are comparatively low compared with daytime traffic volumes. Thus, it has been assumed that night-time noise levels are less critical than daytime noise levels in relation to the criteria. This is in-line with the results of recent traffic noise measurements undertaken on the Busselton Bypass.

The traffic volumes assumed for the relevant section of the Busselton Bypass together with the expected percentage of heavy vehicles assumed in the traffic noise assessment are shown in *Figures 3.1 and 3.2*.

Reference: 8051004-01.doc Page 2

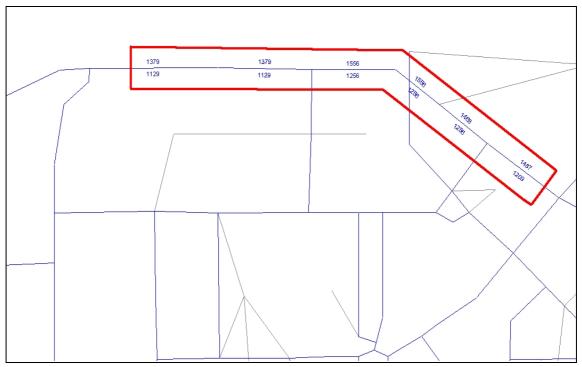


Figure 3.1 Peak Traffic Volumes used for Bypass

Note. Peak Volume assumed to be 10% of Daily Volume.

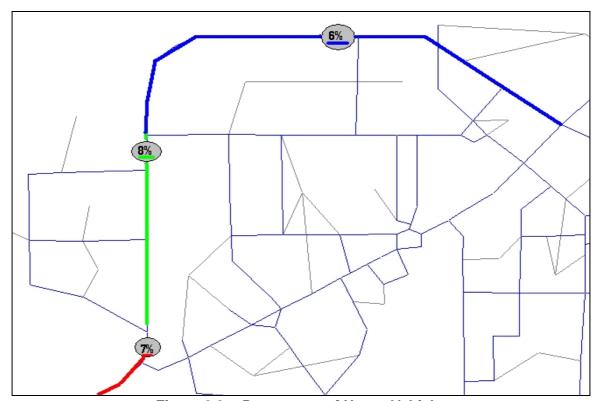


Figure 3.2 Percentage of Heavy Vehicles

□ Road Surface –

Reference: 8051004-01.doc Page 3

It is assumed that the Busselton Bypass will have a dense graded asphalt road surface.

#### □ Vehicle Speed –

It is assumed that the Busselton Bypass will have a posted speed of 80km/hr.

#### 3.1.3 Ground Attenuation

The ground attenuation has been assumed to 0.1 (10%) on roads and industrial areas, 0.0 (0%) for wet areas, such as drainage swales, and 1.0 (100%) for grassed areas. Note 0.0 represents hard reflective surfaces such as water and 1.00 represents absorptive surfaces such as grass.

#### 4 CRITERIA

For this assessment it is the Main Roads *Noise Level Impact Assessment Criteria* that are relevant. The Main Roads *Noise Level Impact Assessment Criteria* is detailed in *Table 4.1* below.

Table 4.1	External Noise	Level Impact Criter	ria for New Roads

Period	Target Level L <sub>Aeq</sub> , dB	Noise Level Limit L <sub>Aeq</sub> , dB			
Day (6am to 10pm)	55	60			
Night (10pm to 6am)	50	55			

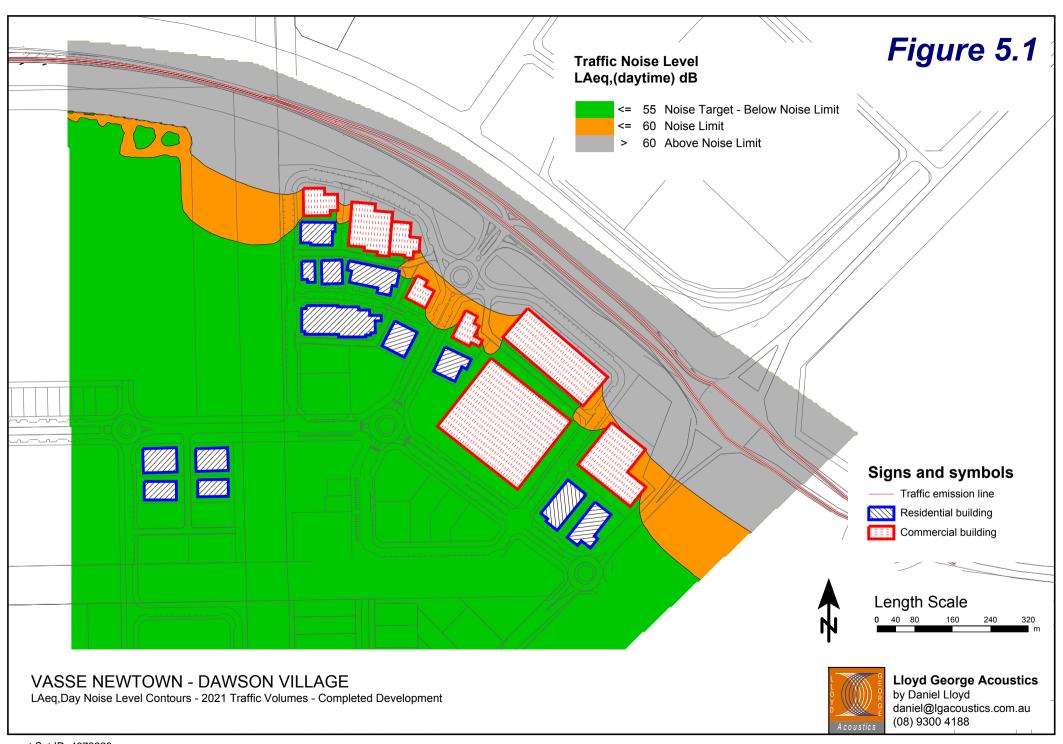
It is noted that whilst the WAPC has prepared a draft SPP (Road and Rail Transport Noise), the Department of Planning and Infrastructure has advised that it is still subject to change, and should not be used for statutory assessment until it is finalised and operational. The Draft SPP is expected to be finalised in 2008. The DPI has accordingly instructed that the Main Roads' *Noise Level Criteria* should be used for assessment purposes for proposals in the interim.

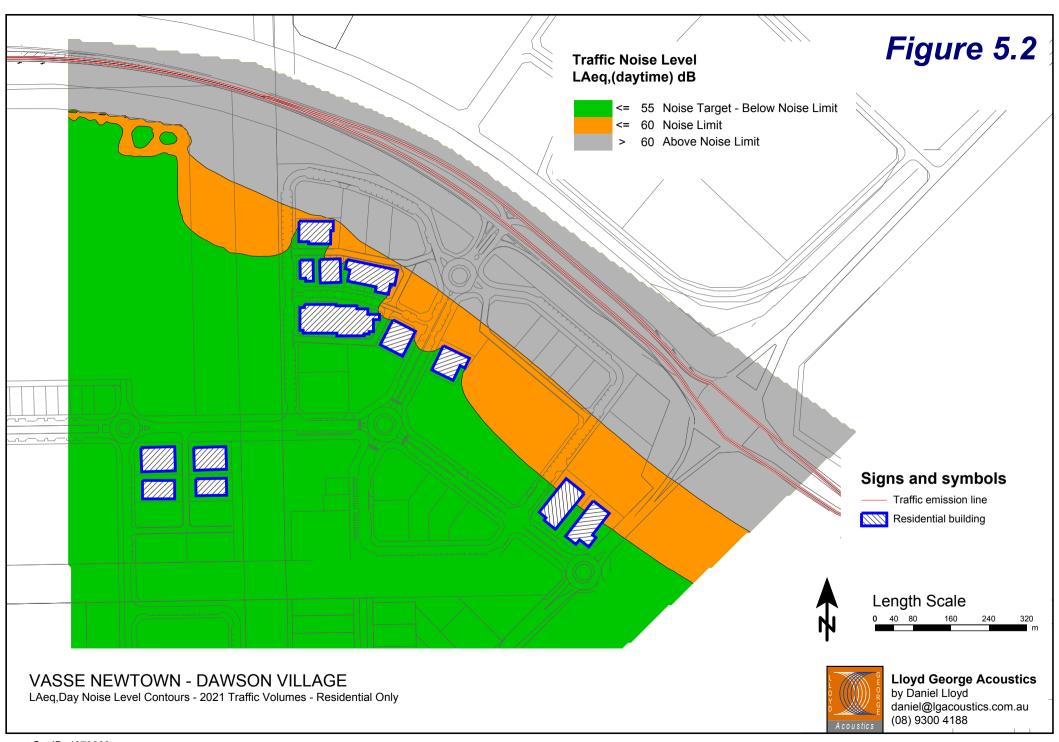
#### 5 RESULTS

The results of the noise modelling are presented as noise level contour plots in *Figures 5.1*. From the predicted traffic noise levels it can be seen that assuming no noise control and a dense graded asphalt road surface, the residential and mixed-use blocks will achieve the Main Roads *Noise Level "Target" Criterion*. The noise level to the commercial buildings is considered to be acceptable.

However, this result assumes that the commercial buildings fronting the road are constructed, thus providing a barrier between the road and the residential and mixed-use blocks. As these predictions assume a horizon of 15 years, we believe this to be a reasonable assumption. Figure 5.2, has been prepared to show the traffic noise contours

Reference: 8051004-01.doc Page 4





assuming that none of the commercial buildings have been constructed. Although it can be seen that there is a significant rise in noise levels, the residential and mixed-use lots are still below the Main Roads *Noise Level "Limit" Criterion.* 

Should it be considered appropriate to address the noise impacts assuming that the commercial buildings are not constructed, the following guidance should be used for facade treatments to achieve acceptable internal noise levels. *Figure 5.3* provides more detailed noise level contours to be used with these treatment recommendations.

#### Treatment 1 (above 55 dB but below 58 dB)

Windows to be 6.0mm thick glass in high-grade residential frames or standard glass in awning/casement style frames closing onto compressible seals. Sliding doors to be 6mm thick glass with Raven RP12 acoustic seals. Entry doors to be hinged high-grade residential or solid timber core with Raven RP10 and RP99 seals.

#### Treatment 2 (58 dB to 60 dB)

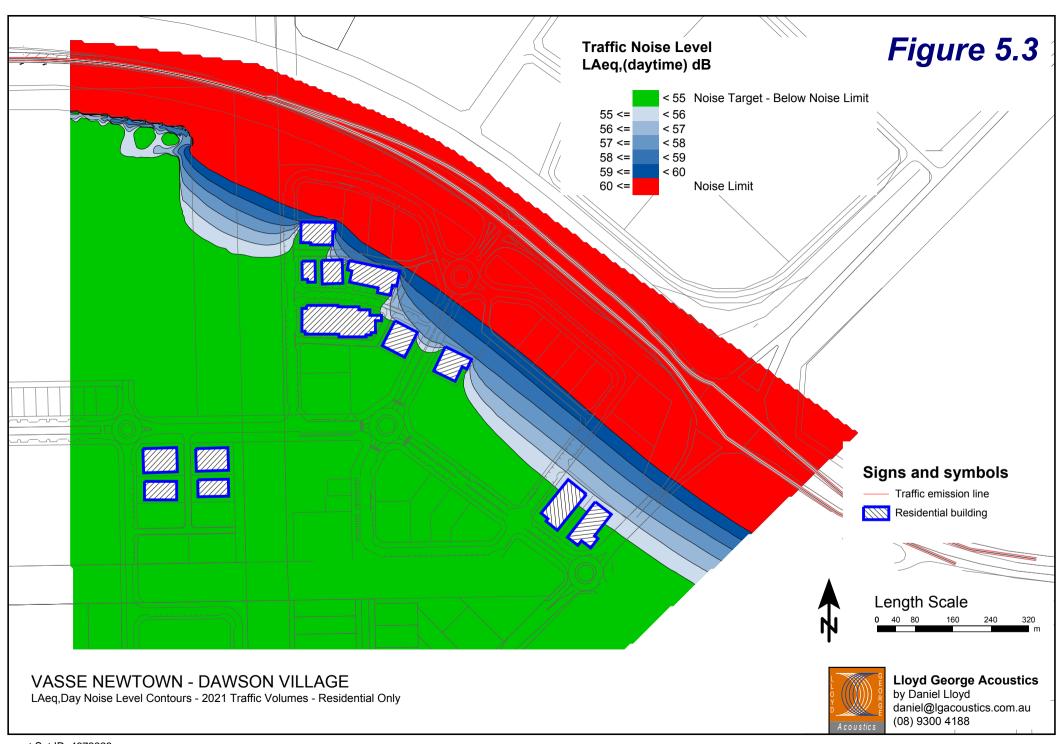
Windows to be 6.38mm thick laminated glass in high-grade residential awning/casement style frames closing onto compressible seals. Sliding doors to be same quality with Raven RP12 acoustic seals. Entry doors to be hinged high-grade residential or solid timber core with Raven RP10 and RP99 seals.

#### 6 CONCLUSION

The results of this assessment show that the Dawson Village Centre DAP satisfies the Main Roads' *Noise Level "Target" Criterion* providing that the commercial buildings are constructed between the residential blocks and the road.

Should the commercial buildings not be built, the Roads' *Noise Level "Limit" Criterion* is achieved and facade treatments would be required to ensure acceptable internal noise levels. The noise level to the commercial buildings is considered to be acceptable.

Reference: 8051004-01.doc Page 5



# VASSE VILLAGE RETAIL NEED & DEMAND ASSESSMENT



## **VASSE VILLAGE**

Retail Need and Demand Assessment

Prepared for **ON-Q PROJECTS**June 2021



#### URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Consultant Scott Riddell
Project Code P0033145
Report Number Final

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#### INTRODUCTION

On-Q Projects has commissioned Urbis to undertake an independent assessment of the need and demand for the current retail floorspace cap applied to Vasse Village to be increased to accommodate the addition of a Bunbury Farmers Market store and other retail uses to address the future shopping requirements of the market.

In the Local Planning Scheme (LPS) Vasse Village is designated a retail floorspace allocation of 4,650 sq.m (NLA). Vasse Village currently provides around 3,420 sq.m of retail NLA and the proposed addition of a 2,250 sq.m NLA Bunbury Farmers Market store and a further 500 sq.m of retail NLA for other shops supporting the role of the centre would increase the provision of retail NLA to around 6,170 sq.m (or +1,520 sq.m relative to the LPS allocation).

The main elements of the research are as follows:

- Analysis of the current and future trade area market, including resident population and retail spending forecasts.
- A review of the current and expected future retail supply in Busselton, including a focus on food & groceries retailing.
- The future growth in demand for retail floorspace in the Vasse Village catchment.
- The expected trading patterns of Bunbury Farmers Market and the market that would support this retailer at Vasse Village.
- Conclusions outlining the capacity of the market to accommodate the Bunbury Farmers Market store and additional retail floorspace longer term in Vasse Village.

#### VASSE VILLAGE

#### 1.1. EXISTING ACTIVITY CENTRE

Vasse Village functions as the town centre for the developing Vasse residential estate and surrounding communities. The activity centre also caters to other markets, notably tourists visiting the Margaret River / Dunsborough / Augusta region, due to its position along the Vasse/Busselton Bypass which links with the Bussell Highway.

The Leeuwin-Naturaliste Sub-Regional Strategy (LNSRS), which informs the Local Planning Scheme and Strategy for the City of Busselton as well as the planning for the Shire of Augusta–Margaret River, designates Vasse Village as a 'Town' which is next highest activity centre hierarchical ranking behind Busselton Town Centre (Regional Centre), Margaret River (Sub-Regional Centre) and Dunsborough (Major Town).

In the City of Busselton's Local Planning Strategy, Vasse Village is designated as a neighbourhood activity centre and with its relative distance from the Busselton Town Centre and inclusion of existing/planned civic and community uses and co-location with a significant employment node (Vasse Industrial estate) it is recognised to have the potential to establish as a prominent activity centre. In Local Planning Scheme No. 21, Vasse Village has a retail NLA allocation of 4,650 sq.m, which was informed based on demand analysis undertaken almost 15 years ago, and is now considered inadequate in the context of the location attributes and role of the centre and future market available to the centre.

As shown in Table 1, the centre currently provides approximately 3,420 sq.m of retail NLA and is anchored by a full-line Coles supermarket. The centre also provides a range of complementary uses, including takeaway food shops, cafes and restaurants, business and personal services, medical and health services, a petrol station and childcare centre. Vasse includes a sizeable employment node of which the workers currently and as this business park expands will increasingly in the future provide support for retail shops and services in Vasse Village.

Table 1 - Vasse Village, Existing and Proposed Retail Floorspace

	Retail NLA (Sq.m)				
	Existing	Change	Proposed		
Majors / Other					
Coles / Liquorland	2,673	-	2,673		
Bunbury Farmers Market	-	2,250	2,250		
Total Majors / Other	2,673	2,250	4,923		
Retail Specialty Shops:					
Food Retail	80	100	180		
Non-Food Retail Shops	669	400	1,069		
Total Retail Specialty Shops	749	500	1,249		
Total Retail Shops	3,422	2,750	6,172		

#### 1.2. PROPOSED DEVELOPMENT

The owners of Vasse Village are proposing to develop a section of the Vasse Village activity centre to include a Bunbury Farmers Market store with approximately 2,250 sq.m of retail NLA. The subject site is located at the south-western corner of the Vasse Bypass and Coomidup Boulevard intersection.

The proposed Bunbury Farmers Market store would have a product line and offer similar to this retailer's store in Bunbury but from a smaller overall footprint as the Bunbury store would provide all of the processing, packaging and baking functions for both stores. The existing store in Bunbury would therefore remain open but serve a secondary and supporting retail role to the proposed store in Vasse which would serve residents of Vasse, elsewhere in the City of Busselton and outlying communities but would include a focus on catering to tourists visiting the Margaret River tourist region.

Source: On-Q Projects

In addition to the Bunbury Farmers Market, further stages of development are proposed to expand the overall range of uses and retail floorspace in the Vasse activity centre. On completion, these new uses are intended to add another 500 sq.m of retail NLA. As shown in Table 1, the addition of the Bunbury Farmers Market (2,250 sq.m) and new retail uses would increase the overall retail NLA in the centre to around 6,170 sq.m.

Figure 1 shows the location and site plan for the proposed Bunbury Farmers Market store.



Figure 1 – Proposed Bunbury Farmers Market Site Plan

#### **Bunbury Farmers Market Overview**

The existing store in Bunbury opened in 2004 and since this time the retailer has built a large and loyal customer base. The success of the business is based on the provision of high value, high quality fresh produce and food products, that are locally sourced and many produced in-store, and a service centred approach to its customers. This underpins a sought after shopping experience.

The product line of the store includes fresh produce, meats and seafood and through their own commercial kitchens the store also provides prepared meals, bakery items, juices, deli items, sandwiches cakes and desserts. The existing store in Bunbury also includes a café.

Their 'paddock to plate' fresh food offer and recognised role as an ambassador for Western Australian produce results in the Bunbury Farmers Market having a significant role in supporting the agricultural industry in Western Australia but particularly growers and other producers in the south west region of the state. The business therefore has a significant role in supporting the local economies, particularly agribusiness which is a key employing industry in the region.

The owners of Bunbury Farmers Market have recognised a need to open a second store in the south-west region of Western Australia, to meet growing demand, accommodate the future growth business and conveniently serving the tourist market (e.g. provision of sufficient carparking spaces for visitors with caravans / trailers). The business has reached a point where successful retailers require a second store to enable the continued growth of the business and improve the customer experience.

Another key factor driving the need for the proposed Vasse store is the construction of the Bunbury Outer Ring Road, which has commenced and planned to be completed in 2024. This arterial road will provide an alternative route around Bunbury and result in the majority of regional 'through' traffic not passing the existing Bunbury Farmers Market store. This will have a direct impact on the accessibility and exposure of

Bunbury Farmers Market store to one its key markets, i.e. tourists heading to Busselton and the Margaret River / Dunsborough / Augusta region. As shown in Table 2, these tourists currently account for a third of all trade in the existing Bunbury store and a loss of access to this market will have an impact on the performance of the Bunbury Farmers Market store.

The proposed new store in Vasse Village (2,250 sq.m NLA) will have a retail area similar to the store in Bunbury but will have more carparking, including dedicated spaces / areas for caravans / trailers which is a current limitation of the existing store. The Vasse store is intended, in addition to serving residents of Busselton and surrounding communities, to be the retailer's main location serving the needs of visitors to the Margaret River tourist region. A sizeable proportion of the existing Bunbury store's customer base is expected to be transferred to the proposed Vasse store. A large share of the trade of the proposed new store in Vasse will therefore be a transfer of existing business.

Table 2 - Existing Bunbury Farmers Market Store Customer Draw

Greater Bunbury Region*	59%
Tourists	33%
Other Areas	8%
Total	100%

<sup>\*</sup> Includes City of Bunbury, Shire of Capel, Shire of Dardanup and Shire of Harvey Source: Near; Urbis

#### 2. PLANNING POLICY AND ACTIVITY CENTRES

#### 2.1. PLANNING POLICY

The future planning of the City of Busselton is guided and directed by a number of key planning instruments as follows:

- The Leeuwin-Naturaliste Sub-Regional Strategy (LNSRS), dated May 2019, provides the overarching strategic guidance and support for the preparation of the City of Busselton's Local Planning Strategy and Scheme No. 21.
- The City of Busselton's Local Planning Strategy 2019 (LPS) was endorsed by WAPC on the 13<sup>th</sup> of March 2020 and:
  - sets out the long-term (25 years plus) broad planning direction for the whole of the District and City of Busselton; and
  - provides the strategic rationale for decisions related to the planning and development of the District, especially decisions related to the progressive review and amendments to the Local Planning Scheme.
- The City of Busselton's Local Planning Scheme No. 21 (LPS 21).

#### 2.2. ACTIVITY CENTRES

The LNSRS and LPS outline the activity centre hierarchy for the City of Busselton which is summarised as follows:

Table 3 - LNSRS: Settlement Hierarchy

Tier	Settlement
Regional Centre	Busselton
Sub-Regional Centre	Margaret River
Major Town	Dunsborough
Town	Augusta, Cowaramup, Vasse
Village	Witchcliffe, Karridale, Kudardup, Prevelly / Gnarabup, Yallingup, Gracetown, Eagle Bay
Tourist Node	Hamelin Bay, Bunker Bay, Smiths Beach

Source: WAPC, LNSRS (May 2019)

Table 4 - LPS: Activity Centre Framework

Туре	Activity Centre
City Centre	Busselton
Town Centre	Dunsborough, Ambergate North
Neighbourhood Centre	Vasse, Yalyalup
Local Centre	West Busselton, Bayside, Broadwater, Bower Road, Monaghan's Corner, Blum Boulevard, Clydebank Avenue, Airport North, Old Broadwater Farm, Ambergate North West, Port Geographe, Dunsborough Lakes, Eagle Bay, Yallingup, Smiths Beach

Source: LPS (2019)

Vasse Village is designated as a 'Town' under the LNSRS and a 'Neighbourhood' centre under the LPS with the intended role of the centre similar under each policy. Refer to Map 2 in Section 3 of this report for the location of the existing and planned activity centres.

Version: 1, Version Date: 26/07/2021

Table 5 – City of Busselton: Current Retail Floorspace by Activity Centre

Retail Floorspace (Sq.m)

City Centre:	
Busselton City Centre	40,000
Town Centre:	
Dunsborough	12,000
Neighbourhood Centre:	
Vasse	3,420
Local Centre:	
West Busselton	1,885
Bayside	1,500
Broadwater	641
Bower Road	462
Monaghan's Corner	400
Blum Boulevard	200
Yallingup	457
Total City of Busselton	60,965

Source: LPS 2019; On-Q Projects

As shown in Table 5 and based on estimates provided in the Local Planning Strategy 2019 (LPS 2019), the City of Busselton is estimated to currently provide around 61,000 sq.m of retail floorspace. In its role as the highest order activity centre, the Busselton City Centre accounts for by far the largest share of retail floorspace in the municipality, i.e. around two-thirds. This is followed by Dunsborough Town Centre with 12,000 sq.m or 20% and Vasse Village with 3,420 sq.m or 6%. The balance of the retail offer in the municipality is provided by a range of local centres.

The LNSRS and LPS 2019 recognises the primacy of the Busselton City Centre but also supports the expansion of existing centres and development of new centres to ensure an adequate provision of retail floorspace is delivered to meet the needs of the community and wider markets. The existing and future activity centres have been allocated indicative target retail floorspace levels, including 4,650 sq.m for Vasse Village.

The analysis supporting the recommended hierarchy and floorspace allocations for the activity centres in the municipality was originally based on a 'Demand Analysis' report prepared by Syme Marmion & Co. in 2007. This demand analysis that informed the preparation of the Local Commercial Planning Strategy (2011) appears to have continued to inform elements of the more recent LPS and requires updating, particularly in the context of Vasse Village and overall retail floorspace requirements across the municipality, recognising:

- The latest ABS figures show that as of June 2020 there were 40,330 residents in the City of Busselton. The Syme Marmion & Co report estimated the municipality's population would reach 38,338 by 2021. This population level was achieved in 2017 and in 2020 was 5% more than the 2021 estimate.
- The more recent Local Planning Strategy (2019) also outlines expectations for a higher growth outcome for the resident population in the City of Busselton. The 2007 demand analysis utilised a population growth rate of between 710 and 850 persons per annum. The later LPS 2019 is based on higher population projections of over 1,000 people per annum and despite the Vasse area being a key growth area there has been no change to the amount of floorspace allocated to Vasse Village activity centre.
- The Vasse activity centre has established ahead of expectations, supported by the pace of residential development in the Vasse estate and surrounding areas as well as the development of key civic/community infrastructure (e.g. several schools, child care centre) and provision of medical / health services in the activity centre.
- The LNSRS includes several WAPC strategic directions (3, 7 and 8) that would have a material impact on the size of market supporting the Vasse Village activity centre. These strategic directions outline potential areas for a change of use and urbanisation, notably the Vasse North Planning Investigation Area (PIA), Vasse South PIA and Abbey (South) PIA. These areas could collectively provide at least another 1,800 lots for residential development or +5,000 people and increase the need and demand for a greater than allocated provision of retail floorspace in Vasse Village.

6

The proposed expansion of Vasse Village to around 6,170 sq.m would address the capacity in the market for a larger sustainable provision of retail floorspace in the City of Busselton and enable the centre to expand to its appropriate market potential given its location and market attributes. The increase in floorspace proposed for Vasse is also modest in the context of overall supply of retail uses in Busselton and would not cannibalise the designated retail floorspace allocations in other centres and not affect the continued primacy of the Busselton City Centre as the Regional Centre in the municipality.

#### 2.3. PROPOSED RETAIL DEVELOPMENTS

There is a range of proposed retail developments in the Busselton region including the following:

- Origins Market. Currently under construction and due to open in spring 2021, the Origins Market is a food market concept that would also include a dining offer and arts, crafts and giftware and flowers/garden supplies. Based on details provided in the Retail Sustainability Assessment (RSA) prepared for the proposed development and a subsequent update in July 2019, the Origins Market is intended to provide around 1,400 sq.m of leasable floorspace occupied by retail stalls. Of this floorspace, there is planned to be around 600 sq.m of food & produce retail uses with the balance accounted for by food & beverage and non-food retail uses.
- Busselton Central. Several stages of improvements at Busselton Central were completed in 2020 with Coles replacing IGA and Red Dot replacing Target Country. An expansion of the centre has been granted development approval, including upgraded convenience retailing, a cinema and externally oriented dining precinct. This development is expected to commence in 2021 and open in late 2022.

#### 3. VASSE VILLAGE TRADE AREA

#### 3.1. TRADE AREA DEFINITION

The resident trade area served by Vasse Village has been defined based on analysis of the customer draw of the centre and shopping patterns in the Busselton region as well as other considerations including the proximity and competitiveness of other centres / shops in the area, road access and other relevant factors.

The shopping patterns / customer draw is based on analysis of Human Movement Data (HMD) from mobile phone devices. This data, summarised in Table 6, indicates that Vasse Village captures the majority of customers and highest market shares from its main trade area. The main trade area is defined to include the Vasse Estate and extend to the coastal suburbs in the north, around 5-6 km in the east and west and include the rural communities to the south. Refer to Map 1.

With a range of uses that attract visitation from throughout Busselton (e.g. adjoining employment node, Cape Naturaliste College) and prominent position along the Busselton Bypass around a fifth of customers come from the balance of the Busselton municipality. The accessible / convenient location of the centre for tourists visiting the Margaret River region also results in the centre having a sizeable proportion of shoppers from outside Busselton.

The Vasse location is supportive of the proposed trading patterns of the Bunbury Farmers Market and expands the available market for retail shops in Vasse Village.

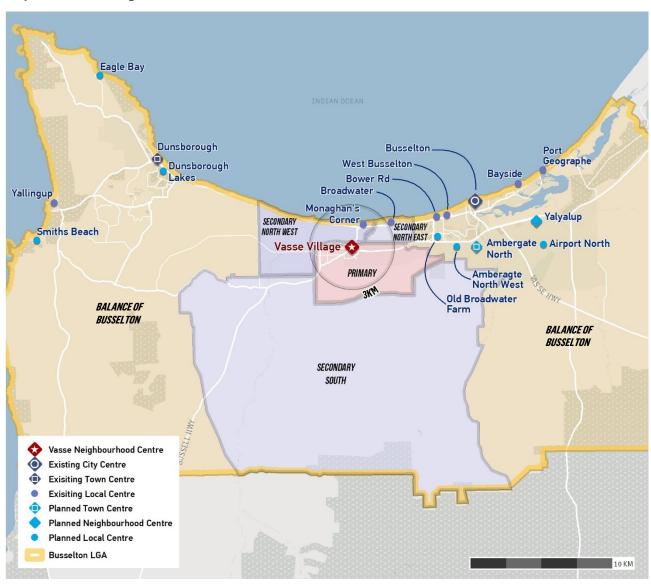
Table 6 - Vasse Village Customer Draw

Proportion of Visits

Vasse Main Trade Area	50%
Balance of Busselton Council Area	23%
Total	73%
Other Areas	27%
Total	100%

Source: Near: Urbis

Map 1 - Vasse Village Trade Area



#### 3.2. TRADE AREA RESIDENT POPULATION AND RETAIL SPENDING

The forecast growth in Vasse's trade area resident population and retail spending is based on the following inputs and sources of information:

- The latest small area population estimates provided by the Australian Bureau of Statistics (ABS), i.e. to June 2020.
- Estimation of the quantum of remaining residential lots to be developed across the key residential estates in the City of Busselton.
- Analysis of recent dwelling approvals, as per data provided by the ABS.
- Analysis of the potential affect the Covid-19 pandemic would have on population growth in the Busselton region, including consideration of contribution to population growth by overseas migration, natural increase and internal (intrastate and interstate) migration.
- Population projections outlined in the City of Busselton's Local Planning Strategy (2019).
- Other sources, including population projections by Western Australian Planning Commission (WAPC).
- MarketInfo, which is a dataset on retail spending by category down to a small area level (ABS SA1 geography) provided by Market Data Systems.
- Historical rates of retail spending per capita by category, sourced from the ABS' Retail Trade and State Accounts (household final consumption expenditure).

#### **Regional Population**

Over the past 10 years, the City of Busselton's population has increased by an average of approximately 970 people or 2.8% per annum.

The resident population of Busselton was 40,330 as of June 2020, an increase of 701 or 1.8% on the June 2019 level. The rate of population growth is trending upwards and is expected to increase as the Western Australia economy continues to recover following the downturn that occurred after the state's resources / economic boom period.

Population projections outlined in the 2019 Local Planning Strategy indicated potential for the City of Busselton's population to grow by over 1,000 people per annum and reach 44,200 by 2021, 50,750 by 2026 and 57,070 by 2031.

Whilst these population levels are unlikely to be reached the projected rate of growth in excess of 1,000 people per annum is achievable and reflective of the overall strength of Busselton's economy and the lifestyle that is offered in the area. Considering both zoned land and land identified for future urban purposes in the LNSRS) there is also a sufficient supply of land set aside for residential development to sustain this rate of population growth.

It is also important to note that whilst the Covid19 pandemic has had an impact on overseas migration levels and the international tourism sector, these are having a modest impact on Busselton's resident population growth (e.g. overseas migrants typically contribute only 15% to population growth in Busselton and the ABS estimated the resident population in the municipality grew by 701 people in the year to June 2020) and tourism generally given the upswing in domestic holidays being undertaken by Australians.

#### **Trade Area Population**

As of June 2020, Vasse Village's main trade area had a population of 10,420. In the whole of Busselton the population was an estimated 40,330. Refer to Table 7.

Based on the expectations for population growth for the City of Busselton, planned lot yields for key residential estates / release areas and anticipated rate and distribution of residential development in the region, the future resident population of the Vasse Village trade area has been estimated.

Over the next 10 years to 2030, the main trade area population is forecast to increase to 13,030. This represents growth of approximately 2.3% or 260 people per annum. In Busselton population growth is estimated to increase by nearly 10,000 over next 10 years.

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Table 7 - Vasse Village Trade Area Population

		Population (No.)				
	2020	2025	2030			
Vasse Main Trade Area	10,420	11,580	13,030			
Balance Busselton Council Area	29,910	33,190	37,220			
Total	40,330	44,770	50,250			
		Annual Population Growth (No.)				
		2020-25	2025-30			
Vasse Main Trade Area		232	290			
Balance Busselton Council Area		656	806			
Total		888	1,096			
		Annual Populat	Annual Population Growth (%)			
		2020-25	2025-30			
Vasse Main Trade Area		2.1%	2.4%			
Balance Busselton Council Area		2.1%	2.3%			
Total		2.1%	2.3%			

1. As at June Source: ABS: Urbis

#### Trade Area Retail Expenditure

Annual retail expenditure by residents of Vasse Village's trade area is estimated based on applying the small area spend per capita estimates from MarketInfo to the resident population. The categories of expenditure included in the estimates align with the City of Busselton's Planning Scheme shop definition (e.g. excludes bulky goods and cafes, restaurants and take-away food).

For calendar year 2020, residents of the Vasse's main trade area are estimated to spend \$121 million on retail goods and services, as per the types of uses specified under the shop definition outlined in the Busselton Planning Scheme. That is, retail expenditure excluding spending on bulky goods and at cafes, restaurants and take-away food shops. In the overall Busselton municipality, retail spending amounted to an estimated \$472 million in 2020. Refer to Table 8.

Table 8 - Vasse Village Trade Area Retail Expenditure (\$2020, incl. GST)

	Food & Groceries Spending Market <sup>1</sup> (\$M)		Other Retail <sup>2</sup> Spending Market <sup>1</sup> (\$M)		Total Retail <sup>2</sup> Spending Market <sup>1</sup> (\$M)				
	2020	2025	2030	2020	2025	2030	2020	2025	2030
Vasse Main Trade Area	65.4	73.9	85.1	55.3	64.9	76.9	120.6	138.7	162.0
Balance Busselton Council Area	191.4	216.4	248.8	160.2	187.7	221.3	351.6	404.2	470.1
Total	256.8	290.3	333.9	215.5	252.6	298.2	472.2	542.9	632.1
	Total Growth (%)								
		20-25	20-30		20-25	20-30		20-25	20-30
Vasse Main Trade Area		13%	30%		17%	39%		15%	34%
Balance Busselton Council Area		13%	30%		17%	38%		15%	34%
Total		13%	30%		17%	38%		15%	34%

<sup>1.</sup> Spending figures are for calendar years inclusive of GST and exclusive of price inflation.

Source: ABS; MarketInfo; Urbis

In the market of most relevance to the proposed Bunbury Farmers Market store at Vasse Village, retail expenditure on food & groceries by Vasse main trade area residents is estimated to increase by \$20 million over the next 10 years. In the overall Busselton municipality, spending on food & groceries is estimated to increase by \$77 million from 2020 to 2030, expressed in constant \$2020 including GST.

<sup>2.</sup> Busselton Planning Scheme Shop Definition

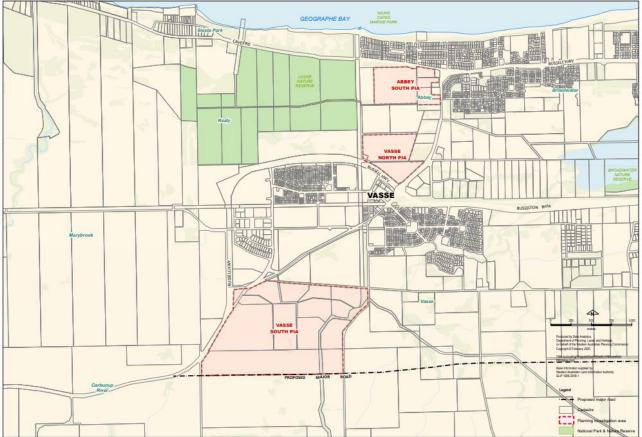
#### **Future Release Areas / Planning Investigation Areas**

As shown in Map 2, there are several areas under investigation for future urbanisation and residential development in close proximity to the existing Vasse release area, including:

- Vasse North Planning Investigation Area (PIA)
- Vasse South PIA
- Abbey South PIA

These areas could potentially deliver an additional +1,800 lots for residential development and increase the potential market that would be directly served by Vasse Village by +5,000 people. The main trade area population for Vasse Village would therefore increase by 35%-40%, including a 70%-80% increase for the primary trade area population.

Map 2 - Vasse North/South and Abbey South Planning Investigation Areas



Source: DPLH / WAPC

#### **Tourist Market**

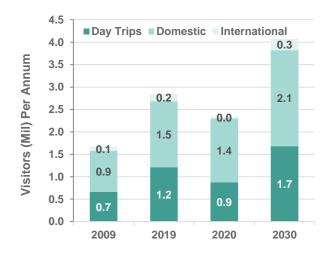
Tourists are an important driver of retail demand in Busselton. Including the Margaret River / Augusta tourist region, the area attracted some 2.9 million visits in calendar 2019. In the Busselton municipality total visits amounted to approximately 1.6 million. The Busselton / Margaret River tourist region is a key destination in Western Australia, consistently accounting for around 15% of all overnight visits in the state.

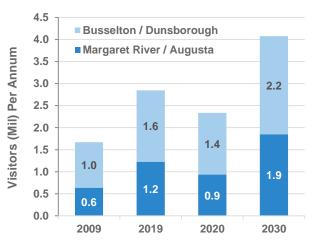
Whilst Covid19 has had a short term impact on tourism in the region, historically tourist numbers have been increasing strongly and grew by 70% or 7% per annum from 2009 to 2019. In 2020, total visits to the area reduced to around 2.3 million however in the December guarter of 2020, domestic overnight visits were almost 40% higher than the level in December quarter 2019. Restrictions on travel overseas has encouraged more travel domestically and the Margaret River / Busselton region is a key beneficiary.

Going forward, the tourist market is expected to fully rebound once international borders reopen and return to a growth path of likely at least 3% per annum. The projections outlined in Chart 1 are likely to be conservative given the planned expansion of Busselton Airport would be expected to provide a significant boost to interstate and international tourism and the Bunbury Outer Ring Road would enhance access to the Busselton and Margaret River tourist regions (potentially at the expense of Bunbury, including retailers such as the Bunbury Farmers Market).

With the Busselton Bypass serving as the key thoroughfare to the Dunsborough and Margaret River tourist regions, Vasse Village is able to tap into the large and growing tourist market in the region. The customer draw of Vasse Village, with 28% of visits coming from people living outside of Busselton, highlights the contribution tourists provide for retail demand at the centre.

Chart 1 - Tourism Trends (Calendar Years)





Source: TRA; Urbis

#### **Busselton Bypass Traffic**

Based on analysis undertaken by Uloth & Associates, the Busselton Bypass, which runs to the north of the Vasse Village site, is estimated to currently carry, on average, approximately 17,830 vehicles per day or 6.5 million vehicles per annum (12 months to March 2021).

If the months affected by Covid-19 lockdowns (e.g. April-May 2020 and February 2021) are excluded from the data, vehicle traffic past the Vasse Village site has been increasing by 6% per annum. The growth of the tourism market as well as an increasing resident base in the region are key contributors to the strong growth in vehicle traffic passing Vasse Village. People using the Busselton Bypass will continue to provide significant increases in potential retail trade activity and in turn demand for retail floorspace at Vasse Village.

# 4. RETAIL FLOORSPACE NEED AND DEMAND ASSESSMENT

This section of the report outlines an assessment of the market need and demand for the proposed increase in retail floorspace at the Vasse Village activity centre.

The definition of retail uses is based on the Busselton Planning Scheme and the current provision of shop uses in Vasse Village is based on instructions from Hatch Roberts Day and a tenancy schedule provided by On-Q Projects.

Currently, Vasse Village provides approximately 3,420 sq.m of retail NLA. The future development of the activity centre is proposed to include an additional 2,750 sq.m of retail NLA, which would increase the overall retail NLA to approximately 6,170 sq.m.

The recent gazettal of Amendment 28 to the Planning Scheme for Busselton indicates a notional allocation of 4,650 sq.m of retail NLA for Vasse Village. The current proposal would therefore result in the retail NLA at Vasse Village exceeding the allocation by approximately 1,520 sq.m.

Of the increase, 82% or 2,250 sq.m is attributable to the proposed Bunbury Farmers Market or food and grocery related floorspace with the balance accounted for by additional specialty shops (i.e. 500 sq.m).

#### 4.1. TAKTICS4 REPORT

A report prepared by Taktics4, dated June 2008, outlined estimates of the sustainable provision of retail floorspace for Vasse Village. This analysis concluded, based on expectations for the future size of the market and market share of retail expenditure (residents, tourists and local workers) that could be captured by Vasse Village, that the centre could support in excess of 8,000 sq.m of retail floorspace by 2021.

Whilst the market will be smaller than forecast by Taktics4 in 2021, the size of the Vasse Village catchment is expected to reach the Taktics4 2021 estimate within the next five years. Therefore based on Taktics4 analysis it suggests that Vasse Village could support at least 8,000 sq.m of retail floorspace by 2025-2026 and further expansion potential longer term with ongoing market growth and if the Vasse Planning Investigation Areas are approved for development.

The assumptions and key inputs of the Taktics4 analysis have been taken into consideration by Urbis in the assessment of the need and demand for additional retail floorspace at Vasse Village.

#### 4.2. URBIS RETAIL NEED AND DEMAND ASSESSMENT

The market need and demand for the proposed additional retail floorspace is assessed based on consideration of the following:

- The role and trading patterns of Vasse Village.
- The current and future size of the resident and visitor markets in Busselton and Vasse Village's catchment.
- The demand for retail floorspace generated by residents of Busselton and visitors to the region.
- The unique role of Bunbury Farmers Market and need for a second store to support the growth of this business.
- Community benefits created by expansion of retail facilities in Vasse Village.

#### Vasse Village Role and Trading Patterns

Vasse Village, with its range of retail tenants and ancillary services, has established as a popular destination for everyday shopping and services for Vasse residents as well as those from throughout Busselton and the local workforce in the Vasse business / industrial estate.

Analysis of the customer draw of Vasse Village shows that the centre serves as the main destination for everyday food and convenience based shopping needs for Vasse residents but the centre also captures trade from elsewhere in Busselton and visitors from outside of Busselton. This is largely a function of the centre's position along the Busselton Bypass and co-location with an employment node (e.g. Vasse business / industrial estate) and inclusion of the Cape Naturaliste College in Vasse. Access to these wider markets

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does not alter the 'neighbourhood' function of the centre which is focussed serving everyday shopping for groceries and other convenience based goods and services needs, but rather enables Vasse Village to capture a larger than typical share of its trade from markets outside of the core local catchment. The location attributes of the centre and type of markets it can serve therefore provide the opportunity to sustain a broader mix of retailing and cater to unique retailers such as the Bunbury Farmers Market.

#### Need for a Second Bunbury Farmers Market store and Advantage of Vasse Village Location

The existing Bunbury Farmers Market store (located along the Forrest Highway / Australind Bypass in Bunbury) is a very strong performing retailer that attracts an average of 40,000 visits per week. The strength and popularity of the store demonstrates a high level of market demand for their offer and shopping experience. With the existing store overtrading relative to the size of store there is clearly a need for a second store in the region.

Furthermore, Vasse Village is an ideal location for a second store for Bunbury Farmers Market, recognising its closer proximity to the Margaret River tourist region and position along the Busselton bypass and which is the main highway to Margaret River.

#### **Bunbury Farmers Market Unique Role and Trading Patterns**

The existing Bunbury Farmers Market store captures approximately 40% of its customers from outside of the Greater Bunbury region, including around 30% from Perth and 10% from elsewhere in Western Australia, interstate and overseas. With the majority of its non-Bunbury customer base expected to be transferred to the proposed store at Vasse Village and with a better ability to service tourists with a larger store, it is evident that the new store in Vasse Village will be to a large extent supported by visitors but also be an important retailer to service the food & grocery needs of residents in Vasse's main trade area. In this regard, the retail NLA permissible in Vasse Village should be flexible enough to accommodate a unique retailer with a unique geographic draw, which relies on the location attributes of Vasse Village, such as the proposed Bunbury Farmers Market store.

The original allocation of 4,650 sq.m, which was based on analysis prepared almost 15 years ago, would not have envisaged the market opportunity to include a retailer such as the Bunbury Farmers Market nor likely adequately recognised the contribution of the Busselton Bypass on driving demand for retail floorspace in Vasse Village.

#### **Future Market Growth**

Retail spending by residents of the catchment served by Vasse Village is estimated to increase by 15% in the next five years to 2025 and 34% from 2020 to 2030. Within this market food & grocery spending is estimated to increase by 13% and 30% respectively.

This market growth will drive demand for the expansion of Vasse Village going forward as well as support additional retail floorspace elsewhere in the Busselton region. As Vasse is the main growth area in Busselton currently the Village centre should be given priority to expand to ensure it continues to meet the needs of the market it serves. There will also still be sufficient market demand in the future to support the development of planned new activity centres in Busselton such as Ambergate to the scale and role intended for these centres as well as ongoing improvements and expansions to existing centres including the Busselton City Centre.

#### **Growth in Tourism**

Prior to the impact of Covid-19 on the tourism sector, tourist visits to the Margaret River region and Busselton were increasing strongly and averaged around 7% and 5% per annum respectively over the 10 year period to calendar year 2019. The volume of vehicle traffic along the Busselton Bypass in the vicinity of Vasse Village correspondingly has also been growing strongly at around 6% per annum.

Whilst growth in tourist numbers is impacted currently, the expectation is for tourism in the Margaret River / Busselton region to again return to a path of growth and be a sizeable contributor to retail floorspace demand in Busselton. Over the next 10 years visitors to the south-west region of Western Australia could increase by at least 3% per annum and potentially at a significantly higher rate with planned investment in

VASSE VILLAGE RETAIL NEED AND DEMAND ASSESSMENT

transport and other tourism related infrastructure (e.g. entertainment hub / convention centre, Busselton Airport, Bunbury Outer Ring Road).

The tourism sector and passing traffic along the Busselton Bypass provide Vasse Village with access to a large and growing market beyond residents of the centre's catchment which supports a larger than typical provision of retail floorspace at the centre.

#### Vasse Village Retail Floorspace

Analysis has also been undertaken of the potential provision of retail floorspace in Vasse Village over the next 10 years. This analysis is summarised in Table 9.

The key points to note are as follows:

- The proposed Bunbury Farmers Market would be expected to capture more than two-thirds of its trade from markets outside Vasse Village's main trade area. The vast majority of the BFM trade coming from beyond the main trade area would be expected to come from markets outside of the City of Busselton.
- Having regard to the location attributes of Vasse Village, the existing customer draw of the centre, expected trading patterns of Bunbury Farmers Market, the markets sustaining other existing and planned activity centres and the designated retail role of the centre, a sustainable share of the market captured by Vasse Village is around 23%-26% in the main trade area and 3-5% in the balance of the City of Busselton. Based on these estimates, around three quarters of expenditure by Vasse main trade area residents and 95% of expenditure by residents elsewhere in Busselton would be available for other retailing in Busselton. The share captured by Vasse Village is appropriate for a neighbourhood scale centre and within Busselton the vast majority of trade is supported by residents of the main trade area with only modest market share captured from elsewhere in Busselton.
- Based the application of potential market shares of the resident expenditure market in Vasse Village's main trade area and balance of Busselton and allowing for between 35%-40% of turnover to be sourced from markets outside of Busselton (e.g. tourists), which allows for half of the Bunbury Farmers Market trade coming from outside of Busselton, the potential retail turnover for Vasse Village is around \$76 million in 2022, \$81 million in 2025 and \$90 million in 2030 (incl. GST and in \$2020).
- Based on industry trading level benchmarks the supportable retail floorspace is assessed at 6,300 sq.m. in 2022, increasing to 6,600 sq.m in 2025 and around 7,100 sq.m in 2030.
- The proposed expansion of the centre to 6,170 sq.m would be within the sustainable provision of floorspace at Vasse Village.

Table 9 - Supportable Scale of Vasse Village

	2022	2025	2030
Retail Expenditure (\$2020 M)			
Vasse Main Trade Area	126.4	138.7	162.0
Balance of Busselton Council Area	<u>369.2</u>	<u>404.2</u>	<u>470.1</u>
Total	495.6	542.9	632.1
Potential Market Share			
Vasse Main Trade Area	24%	24%	23%
Balance of Busselton Council Area	<u>4%</u>	<u>4%</u>	<u>4%</u>
Total	9%	9%	9%
Turnover from Catchment (\$2020 M)	46.8	50.3	56.7
Turnover From Beyond Busselton (\$2020 M)	29.7	31.0	33.4
Potential Retail Turnover (\$2020 M)	76.4	81.3	90.2
Average Trading Level (\$ per NLA sq.m)	12,110	12,320	12,610
Potential Retail Floorspace (NLA sq.m)	6,310	6,600	7,150

Source: Urbis

#### Additional Market Growth Drivers - Vasse Planning Investigation Areas

The Vasse and Abbey Investigation Areas, outlined in the LNSRS, could provide at least 1,800 additional residential lots and +5,000 more residents in the core catchment of Vasse Village.

These additional residents will generate demand for more retail floorspace and given the proximity of Vasse Village to these residents, the centre would serve as their main shopping centre for everyday retail needs.

#### **Community Benefits**

The Bunbury Farmers Market store also provides a range of benefits for the community, including more convenient access to a retailer offering good value for quality produce / food products, spin-off benefits to other retailers and services in Vasse Village which will enhance the sustainability of these businesses and new employment generation particularly for residents of Busselton.

#### 5. KEY CONCLUSIONS

In summary, the analysis of the Busselton and Vasse markets indicate that there is a demonstrable market need and demand in support of Vasse Village increasing its provision of retail NLA to 6,170 sq.m by way of adding a new Bunbury Farmers Market store and 500 sq.m of retail specialty shops.

The proposed scale of Vasse Village is supportable by the market recognising:

- The Bunbury Farmers Market is a unique retailer that is seeking a location at Vasse Village in order to address a clear need of the market. Additionally, a large share of the BFM's customer base at Vasse Village will be provided by a transfer of business from the existing store in Bunbury which lessens the impact on incumbent or future retailers in the Busselton market.
- The demand analysis indicates that there is sufficient capacity in the market to support the proposed expansion of Vasse Village to include a Bunbury Farmers Market store and overall increase in retail floorspace to 6,170 sq.m. The future size of the retail market could support increases to retail floorspace to 6,600 sq.m by 2025 and around 7,100 sq.m by 2030 whilst still allowing for the expansion of existing activity centres and not compromising the development of planned new activity centres.
- The proposed expansion of retail floorspace at Vasse Village would not impact the primacy of the Busselton City Centre, recognising the Vasse centre would continue to be based on food and convenience retailing, the City Centre would have more than 7 times more retail floorspace and the potential scale of Vasse Village would not provide capacity to include non-food majors such as a DDS or other like retailers.
- The Vasse Planning Investigation Areas, which could increase Vasse's main trade area by more than 5,000 residents, would provide further basis for expansion of convenience based retail facilities at Vasse Village to ensure the centre continues to adequately serve the everyday shopping needs of its market.
- Including the proposed expansion of Vasse Village there is sufficient capacity in the market to support the ongoing expansion and improvement of retailing in the City of Busselton as outlined in the City of Busselton's Local Planning Strategy, including the City Centre, other neighbourhood and planned activity centres.

Furthermore, the proposed expansion of retail floorspace at Vasse Village will have a range of benefits for the community including enhanced access to retail goods and services, generation of new employment opportunities and the broader activity provided by the BFM could support the delivery of other services that further benefit Busselton residents.

It is recommended that Special Purpose Area 65 detailed in Local Planning Scheme No. 21 be amended to reflect the conclusions of this Report which indicates that the sustainable provision of retail floorspace in Vasse Village is in the order of 6,500 sq.m in the short term. Provisions should also be outlined to provide flexibility for the centre to expand in the future in line with market demand and its role in the hierarchy.

#### **DISCLAIMER**

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the Assessments and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

# BUSHFIRE MANAGEMENT PLAN



Signature of Practitioner

**Bushfire Management Plan and Site Details** 

Site Address / Plan Reference: Vasse Village Centre



Date 31/10/2022

### **Bushfire Management Plan Coversheet**

This Coversheet and accompanying Bushfire Management Plan has been prepared and issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme.

Suburb: Vasse		State:	WA	<b>P/code</b> : 6280	
Local government area: City of Busselton					
<b>Description of the planning proposal:</b> Precinct Structure P	lan, Subdivision Applic	ation and JDAP applica	tion		
BMP Plan / Reference Number: 61291/139,062	Version: R0	1 Rev 2	Date of Issue:	31/10/2022	
Client / Business Name: JV of Perron Developments P/L	& Stawell P/L				
Reason for referral to DFES			Yes	No No	
Has the BAL been calculated by a method other than memethod 1 has been used to calculate the BAL)?	ethod 1 as outlined in A	AS3959 (tick no if AS39	59 🗆		
Have any of the bushfire protection criteria elements be principle (tick no if only acceptable solutions have been		•	nce $\Box$		
Is the proposal any of the following special developme	nt types (see SPP 3.7 fe	or definitions)?			
Unavoidable development (in BAL-40 or BAL-FZ)					
Strategic planning proposal (including rezoning application)	ions)		₹	<b>1</b> 🗆	
Minor development (in BAL-40 or BAL-FZ)					
High risk land-use					
Vulnerable land-use					
If the development is a special development type as listed above, explain why the proposal is considered to be one of the above listed classifications (E.g. considered vulnerable land-use as the development is for accommodation of the elderly, etc.)? The proposal includes a Precinct Structure Plan, which is a strategic planning proposal.					
Note: The decision maker (e.g. local government or the more) of the above answers are ticked "Yes".	e WAPC) should only re	efer the proposal to D	FES for comm	ent if one (or	
BPAD Accredited Practitioner Details and Declarate	tion	<b>以是自然是</b>	fining the Tra		
	Accreditation Level Level 2	Accreditation No. 37803 Contact No. (08) 9792 4797	Accredit 31/08/	tation Expiry 2023	
I declare that the information provided within this bus	hfire management pla	n is to the best of my	knowledge tr	ue and correct	



Joint Venture of Perron Developments P/L & Stawell P/L

Bushfire Management Plan (Precinct Structure Plan, Subdivision Application and JDAP Application)

Vasse Village Centre

31 October 2022

61291/139,062 (Rev 2)

JBS&G Australia Pty Ltd T/A Strategen-JBS&G



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### 1. Proposal details

### 1.1 Background

Hatch RobertsDay, in conjunction with ON-Q Projects, on behalf of the Joint Venture (JV) of Perron Developments P/L and Stawell P/L, is seeking to lodge a Precinct Structure Plan (PSP) amendment (Figure 1) to guide ongoing development within Vasse Village Centre, located in the City of Busselton. A subdivision application is being lodged concurrently with the PSP amendment for Stage 2A of Vasse Village Centre, located within the PSP amendment area (Figure 2). In addition, the Vasse Village by Bunbury Farmers Market (BFM) Joint Development Assessment Panel (JDAP) application is being lodged by a separate applicant for a proposed shop (fresh food retailer) within Lot 124 of the proposed subdivision (Figure 3).

The project area encompasses Vasse Village Centre Stage 2A (relevant to all three of the abovementioned planning applications). This area currently comprises the undeveloped northwest portion of Vasse Village Centre. The project area is proposed to be developed as a 'Local Centre', with four proposed commercial lots, an internal road and a northern strip of POS along the Bussell Highway interface. As mentioned above, one of the proposed commercial lots (proposed Lot 124) is to contain the proposed BFM development.

The project area does not include the balance of Vasse Village Centre, which is already subject to various stages of planning, subdivision and development approval and/or construction, including WAPC subdivision approvals for Stage 1 (WAPC Ref. 150503) and the minor boundary readjustment for Lot 122 Coles (WAPC Ref. 153992). In addition, a large proportion of this balance area is not designated bushfire prone, so does not require formal bushfire management consideration. These balance areas are not relevant to the subject planning applications and will not be referenced further in this document.

### 1.2 Site description

The project area currently comprises cleared, undeveloped land and is surrounded by the following (see Figure 4):

- Bussell Highway and existing pasture land to the north
- Coomidup Boulevard and existing/proposed development within Vasse Village Centre to the east
- Napoleon Promenade and existing/proposed development within Vasse Village Centre and the broader Vasse townsite to the south
- Buayanyup Drain and existing/proposed development of Vantage at Vasse to the west.

The northern portion of the project area is designated as bushfire prone on the Map of Bush Fire Prone Areas (DFES 2019), as indicated in Plate 1.

### 1.3 Purpose

This Bushfire Management Plan (BMP) has been prepared to accompany the proposed PSP amendment, Stage 2A subdivision application and Vasse Village by BFM JDAP application to address requirements under Policy Measures 6.3, 6.4 and 6.5 of *State Planning Policy 3.7 Planning in Bushfire-Prone Areas* (SPP 3.7; WAPC 2015) and *Guidelines for Planning in Bushfire-Prone Areas* (the Guidelines; WAPC 2017).

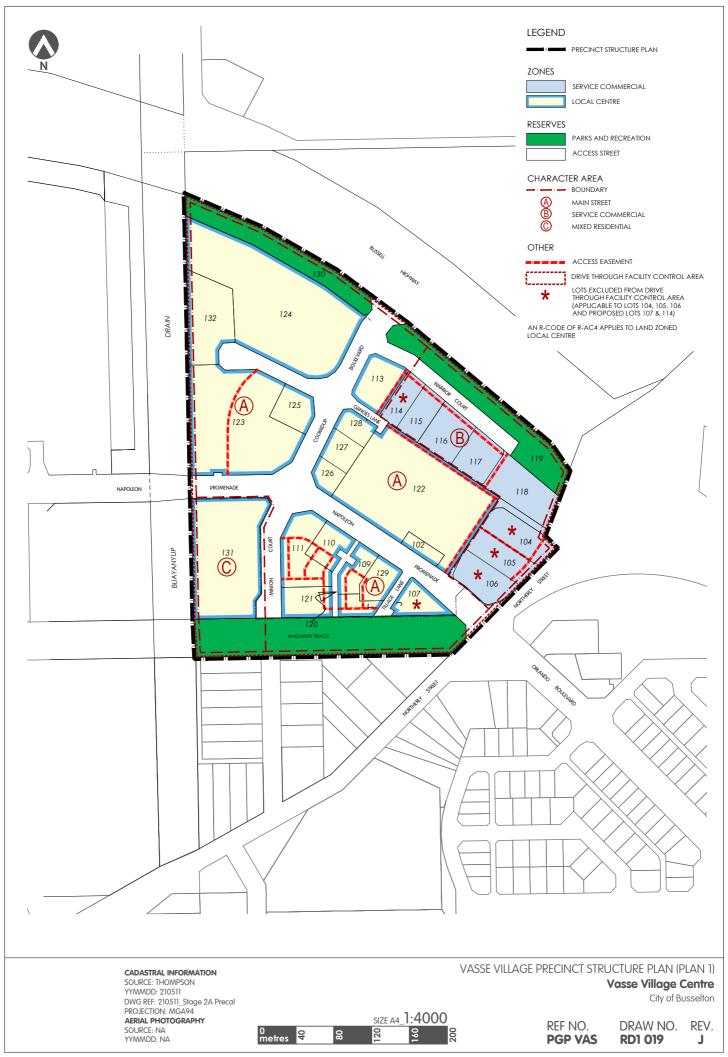


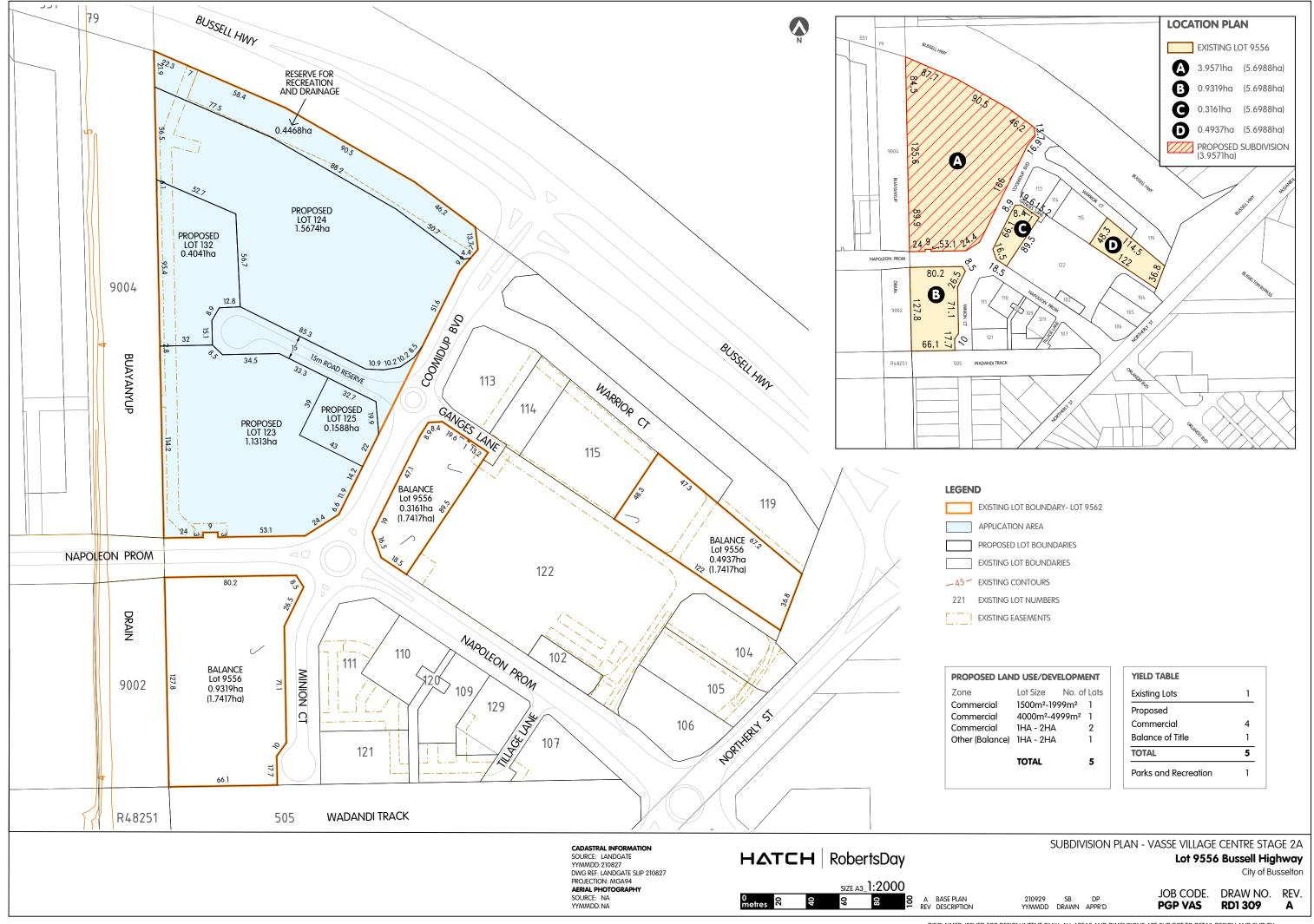
### 1.4 Other plans/reports

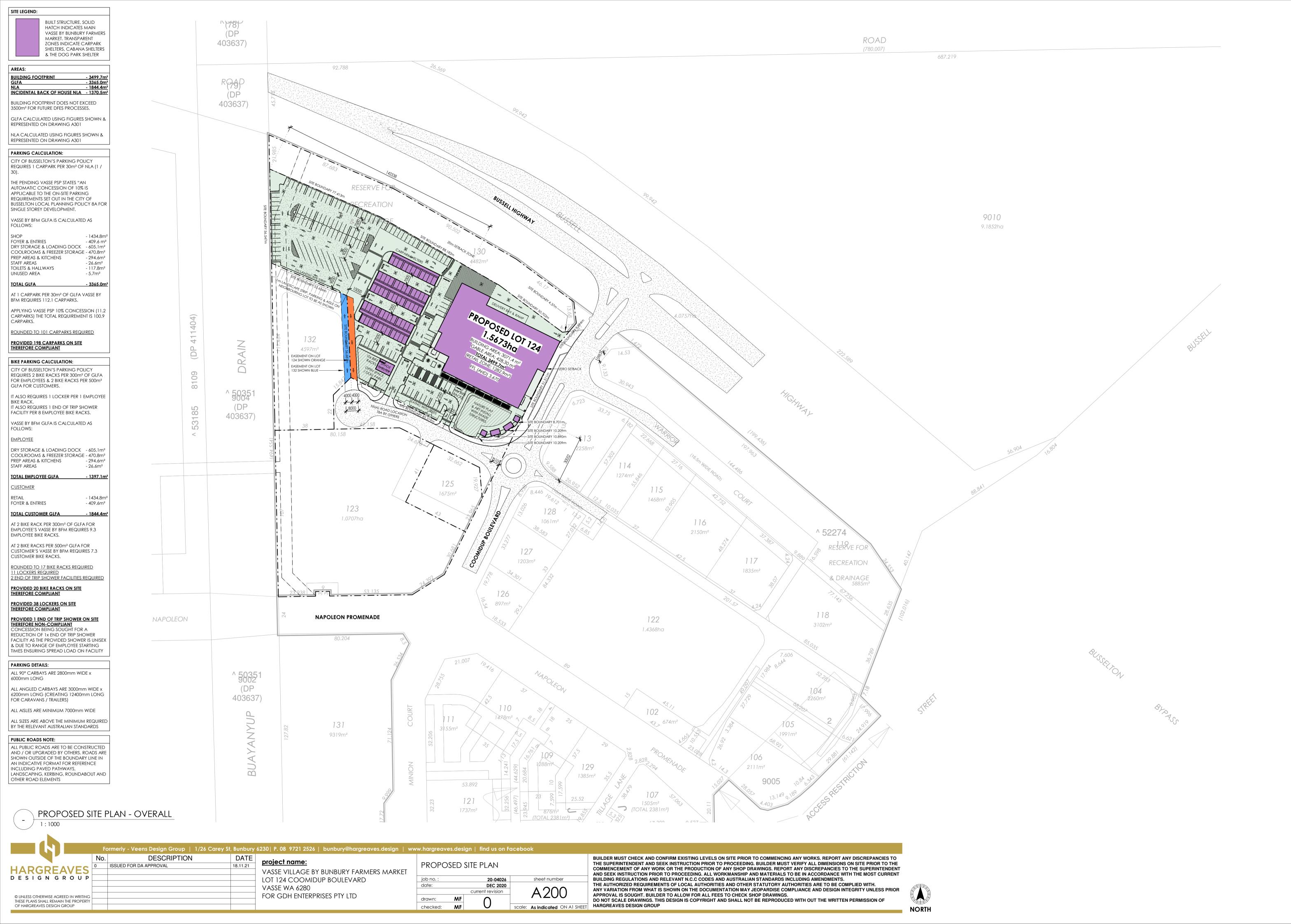
There are no other bushfire or environmental reports or assessments known to have been prepared previously for the project area. Strategen-JBS&G has previously prepared BMPs for land adjacent north and south of the project area to progress structure planning and subdivision application for the surrounding Vasse locality.



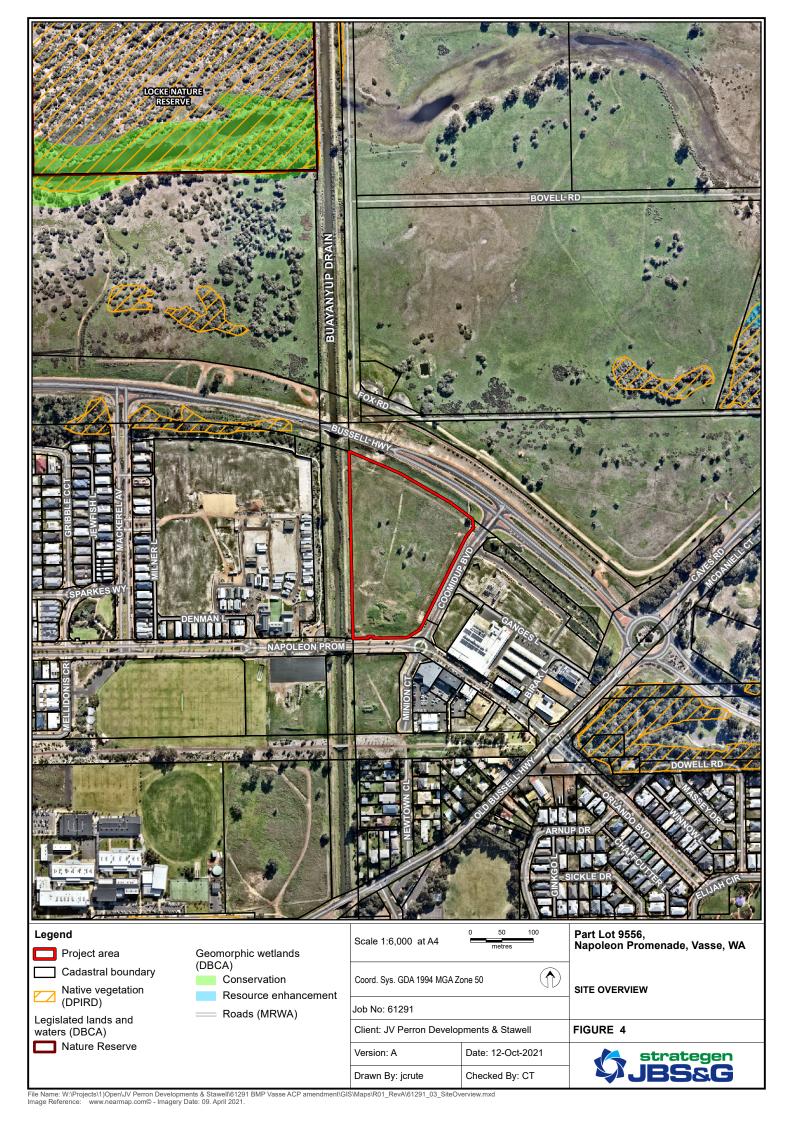
Plate 1: Map of Bush Fire Prone Areas (DFES 2021)







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### 2. Environmental considerations

### 2.1 Native vegetation - modification and clearing

The project area is predominantly cleared and comprises a large proportion of open grassland that has limited environmental value. The project area is expected to be fully developed as a non-vegetated/low threat managed space as part of the ongoing staged extension of Vasse Village Centre.

A search of publicly available environmental data relating to the project area has been undertaken and is summarised in Table 1.

**Table 1: Summary of environmental values** 

Table 1. Sullillia	_			
	Not	Mapped as occurring		
Environmental	mapped as	within or adjacent to the		
	occurring	project area		
value	within or			Description
value	adjacent to			
	the project	Within	Adjacent	
	area			
Environmentally	,			N/A
Sensitive Area	✓			
Swan Bioplan				N/A
				IN/A
Regionally	$\checkmark$			
Significant				
Natural Area				
Ecological	$\checkmark$			N/A
linkages	•			
Wetlands				A Conservation Category Wetland is mapped as occurring
			<b>✓</b>	northwest of the project area. No Ramsar wetlands are
				present.
Waterways				An artificial drain line (Buayanyup Drain) is adjacent west of
Waterways			✓	the project area.
Threatened				
				N/A
Ecological				
Communities	<b>V</b>			
listed under the				
EPBC Act				
Threatened and				A Priority 3 Flora species is mapped as occurring 1 km east
priority flora				of the project area while a Threatened Flora species is
			<b>✓</b>	mapped as occurring 1.5 km east of the project area. A
				Priority 4 Flora species occurs 2.5 km northeast of the
				project area.
Fauna habitat				Adjacent native vegetation areas are mapped as containing
listed under the				potential feeding areas for Carnaby's Black Cockatoo and
EPBC Act			✓	Western Ringtail Possum. No Quenda habitat is mapped as
				occurring.
Threatened and	1			Numerous Threatened Fauna species are mapped as
priority fauna			<b>✓</b>	occurring adjacent to the project area. Protected Fauna
				species is mapped as occurring 2.5 km to the east of the
				project area.
Bush Forever Site	✓			N/A
DBCA managed				Locke Nature Reserve is located to the north of the project
lands and waters				area.
(includes			/	
legislated lands			✓	
and waters and				
lands of interest)				
Conservation				N/A
	$\checkmark$			IN/A
covenants				



### 2.2 Revegetation / Landscape Plans

A landscape plan will be prepared for the POS buffer situated at the northern interface with Bussell Highway. The landscape plan will need to balance City of Busselton revegetation and screening expectations with the bushfire management requirements for the proposed development, in particular for the proposed BFM. The landscaping approach depicted in this BMP is based on adopting a precautionary worst case bushfire outcome (i.e. Class A forest) within the POS buffer to prevent limitations on revegetation species and density so as to meet the City's expectation. Due to the Class A forest classification, a 21 m wide Asset Protection Zone (APZ) will need to be provided adjacent to the BFM to ensure development is compliantly sited in an area of BAL-29. A portion of the APZ occurs within the POS buffer, which will need to be established and maintained to a low threat state. The balance of the POS buffer can otherwise be planted out to achieve any revegetation objective. Should it be determined at a later stage (i.e. based on detailed landscaping design) that a Class A forest classification does not represent the proposed landscaping outcome and that a reduced classification is more appropriate (i.e. Class B woodland, Class D scrub, Class C shrubland, Class G grassland and/or exclusion under Clause 2.2.3.2 of AS3959), then the APZ could be reduced accordingly via updated BAL assessment.

All other landscaping throughout the project area, including road verges, will be established as low threat vegetation typical of an urban town centre. All landscaping will ultimately be guided by detailed landscape plans prepared at a later stage, consistent with the requirements of this BMP.



### 3. Bushfire assessment results

### 3.1 Assessment inputs

### 3.1.1 Vegetation classification

Strategen-JBS&G assessed classified vegetation and exclusions within 150 m of the project area through on-ground verification on 27 July 2021 in accordance with AS 3959—2018 Construction of Buildings in Bushfire-Prone Areas (AS 3959; SA 2018) and the Visual Guide for Bushfire Risk Assessment in Western Australia (DoP 2016). Georeferenced site photos and a description of the vegetation classifications and exclusions are contained in Appendix A and depicted in Figure 5 (for pre-development conditions) and Figure 6 (for post-development conditions).

The vegetation classifications assessed within the project area and adjacent 150 m comprised:

- pockets of Class B woodland of sparse peppermints over grass to the northwest
- pockets of Class D scrub of swamp paperbark to the north and drainage line revegetation to the west
- broad areas of Class G grassland of unmanaged grass in the surrounding landscape.

Excluded areas within and surrounding the project area comprise the following:

- excluded under Clause 2.2.3.2 (d): narrow strip of entry landscaped vegetation, less than 20 m in width and greater than 20 m from the project area and other areas of classified vegetation
- excluded under Clause 2.2.3.2 (e): non-vegetated areas (i.e. footpaths, buildings, roads, water bodies, etc)
- excluded under Clause 2.2.3.2 (f): low threat areas (i.e. grass maintained below 100 mm in height with enforceability for ongoing management under the City's annual firebreak notice, existing low threat landscaped and managed POS areas, manicured lawns, residential gardens, etc).

### 3.1.2 Effective slope

Strategen-JBS&G assessed effective slope under classified vegetation through on-ground verification on 27 July 2021 in accordance with AS 3959. Results were cross-referenced with DPIRD 2m contour data, which is depicted in Figure 5 (for pre-development conditions) and Figure 6 (for post-development conditions).

The topography of the project area and surrounding land is characterised by flat and low-lying land at approximately 2 m elevation typical of the surrounding Vasse and Busselton locales. Effective slope under classified vegetation was assessed to be flat/upslope (i.e. 0 degrees) in all cases except for the eastern bank of Buayanyup Drain, which was assessed to be downslope at 10–15 degrees.



### 3.1.3 Pre-development inputs

A summary of the assessed pre-development classified vegetation, exclusions and effective slope within the project area and adjacent 150 m are listed in Table 2 and illustrated in Figure 5.

Table 2: Pre-development vegetation classifications/exclusions and effective slope

Vegetation plot	Vegetation classification	Effective slope	Comments
1	Class B Woodland	Flat/upslope (0°)	Vegetation dominated by sparse peppermints over grass.
2	Class D Scrub	Flat/upslope (0°)	Combination of melaleuca scrub and drainage line revegetation (assessed at maturity) comprising a continuous horizontal fuel profile between 2–6 m in height.
3	Class G Grassland	Downslope >10–15°	Unmanaged grass greater than 100 mm in height.
4	Class G Grassland	Flat/upslope (0°)	Unmanaged grass greater than 100 mm in height.
5	Excluded – Clause 2.2.3.2 [d]	N/A	Narrow strip of entry landscaped vegetation to the northeast, less than 20 m in width and greater than 20 m from the project area and other areas of classified vegetation.
6	Excluded – Non- vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas (i.e. footpaths, buildings, roads, water bodies) and low threat vegetation (i.e. grass maintained below 100 mm in height with enforceability for ongoing maintenance, landscaped and managed POS, manicured lawns, residential gardens, etc).

### 3.1.4 Post-development inputs

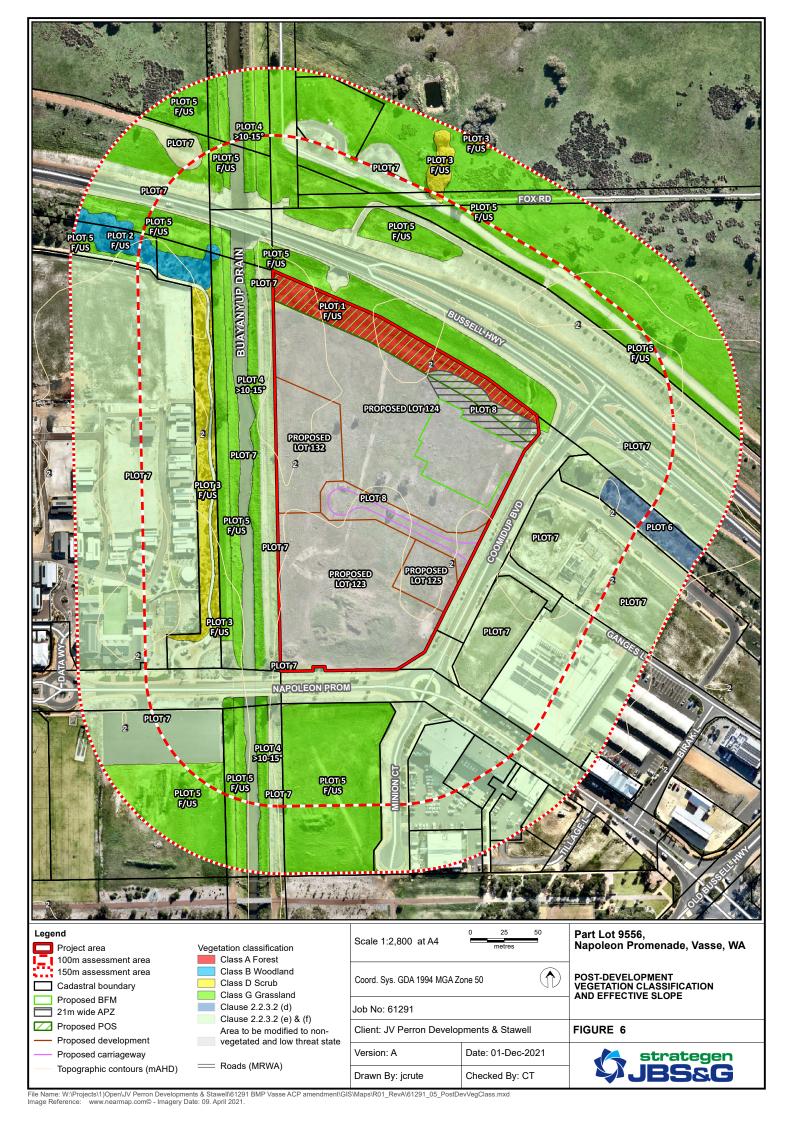
A summary of the expected post-development classified vegetation, exclusions and effective slope within the assessment area are listed in Table 3 and illustrated in Figure 6.

The post-development vegetation classifications and exclusions for all land external to the project area are expected to remain the same as for the pre-development conditions. However, the internal site area will be modified to a low threat state as a result of proposed development of the local centre, except for the anticipated Class A forest revegetation within the northern POS buffer.

Table 3: Post-development vegetation classifications/exclusions and effective slope

Vegetation	Vegetation	Effective	Comments
plot	classification	slope	
1	Class A Forest	Flat/upslope (0°)	Anticipated revegetation of northern POS buffer.
	Clara D	` '	Manadadi and a distribution of the same and
2	Class B	Flat/upslope	Vegetation dominated by sparse peppermints over grass.
	Woodland	(0°)	
3	Class D Scrub	Flat/upslope	
		(0°)	at maturity) comprising a continuous horizontal fuel profile between 2–
			6 m in height.
4	Class G Grassland	Downslope	Unmanaged grass greater than 100 mm in height.
		>10-15°	
5	Class G Grassland	Flat/upslope	Unmanaged grass greater than 100 mm in height.
		(0°)	
6	Excluded –	N/A	Narrow strip of entry landscaped vegetation to the northeast, less than
	Clause 2.2.3.2 [d]	,	20 m in width and greater than 20 m from the project area and other
			areas of classified vegetation.
7	Excluded – Non-	N/A	Non-vegetated areas (i.e. footpaths, buildings, roads, water bodies) and
,	vegetated and	11/7	low threat vegetation (i.e. grass maintained below 100 mm in height with
	Low threat		enforceability for ongoing maintenance, landscaped and managed POS,
	(Clause 2.2.3.2		manicured lawns, residential gardens, etc).
	•		manicured lawns, residential gardens, etc).
	[e] and [f])		
8	Excluded – Non-	N/A	Area to be modified to a low threat state as part of proposed
	vegetated and		development.
	Low threat		
	(Clause 2.2.3.2		
	[e] and [f])		







### 3.2 Assessment outputs

### 3.2.1 Pre-development Bushfire Hazard Level (BHL) assessment

The pre-development vegetation extent has been assigned a Bushfire Hazard Level (BHL) in accordance with the methodology detailed in Appendix Two of the Guidelines, as outlined in Table 4.

**Table 4: Bushfire hazard levels and characteristics** 

Bushfire hazard level	Characteristics*
Extreme	<ul><li>Class A Forest</li><li>Class B Woodland (05)</li></ul>
	<ul> <li>Class D Scrub</li> <li>Any classified vegetation with a greater than 10° slope.</li> </ul>
Moderate	<ul> <li>Class B Low woodland (07)</li> <li>Class C Shrubland</li> <li>Class E Mallee/Mulga</li> <li>Class G Grassland, including sown pasture and crops</li> <li>Class G Grassland: Open woodland (06), Low open woodland (08), Open shrubland (09)</li> <li>Vegetation that has a low hazard level but is within 100 metres of vegetation classified as a</li> </ul>
Low	<ul> <li>moderate or extreme hazard, is to adopt a moderate hazard level.</li> <li>Low threat vegetation may include areas of maintained lawns, golf courses, public recreation reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks</li> </ul>
	<ul> <li>Managed grassland in a minimal fuel condition (insufficient fuel is available to significantly increase the severity of the bushfire attack). For example, short-cropped grass to a nominal height of 100 millimetre</li> <li>Non-vegetated areas including waterways, roads, footpaths, buildings and rock outcrops.</li> </ul>
*Vegetation cla	ssifications from AS 3959-2018 Table 2.3.

Strategen-JBS&G has mapped the pre-development BHLs within the project area and adjacent 150 m. The BHLs have been assessed on the basis of the vegetation discussed in Section 3.1.3 (i.e. the current pre-development extent of classified vegetation and exclusions within and surrounding the project area).

The pre-development BHL assessment (refer to Figure 7) indicates that based on the existing vegetation, the project area contains land with a Moderate bushfire hazard level, which is deemed acceptable for proposed development in accordance with acceptable solution A1.1 of the Guidelines.

### 3.2.2 Post-development BAL contour assessment

Proposed lot layout is depicted in the Stage 2A subdivision plan (Figure 2); and building location for the proposed BFM is depicted in the Vasse Village by BFM JDAP Site Plan (Figure 3); therefore, Strategen-JBS&G has undertaken a BAL contour assessment in accordance with Method 1 of AS 3959 for the project area (Figure 8). The Method 1 procedure incorporates the following factors:

- state adopted FDI 80 rating
- vegetation classification
- effective slope
- distance maintained between proposed development areas and the classified vegetation.



The BAL rating gives an indication of the level of bushfire attack (i.e. the radiant heat flux) that may be received by proposed development and subsequently informs the standard of building construction and/or setbacks required for proposed habitable development to potentially withstand such impacts and achieve compliance with relevant acceptable solutions/bushfire protection criteria of the Guidelines.

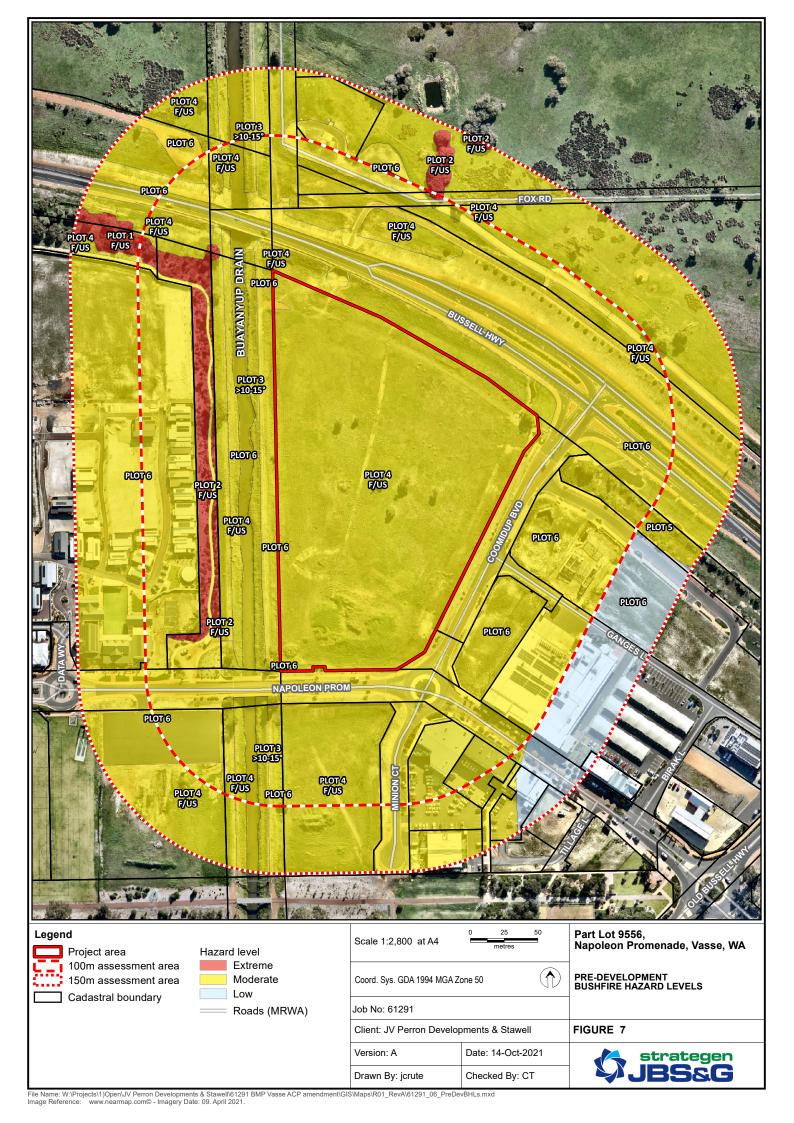
The BAL contours are based on the vegetation classifications and effective slope observed at the time of inspection, consideration of proposed areas to be modified to a low threat state as part of proposed development and areas of proposed revegetation.

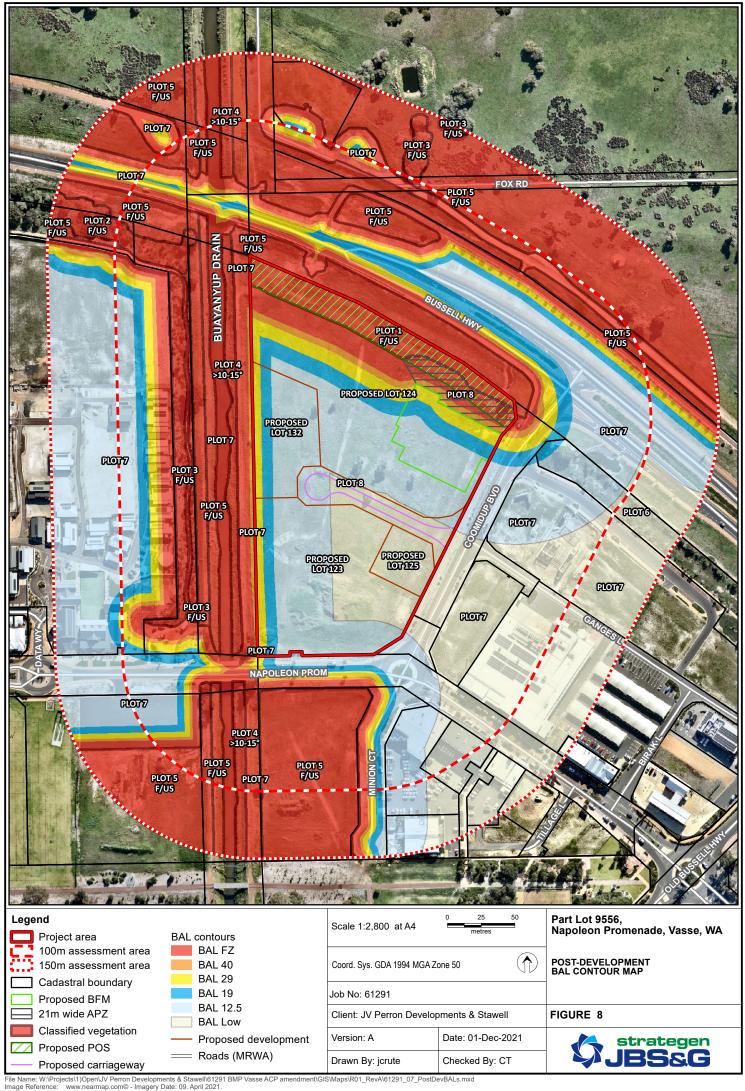
Strategen-JBS&G has mapped the expected post-development BAL contours to demonstrate that the level of BAL impact is manageable and compliant in accordance with standard acceptable solution controls to enable BAL-29 or lower development to occur within the project area. The BALs have been assigned on the basis of the vegetation discussed in Section 3.1.4, as outlined in Table 3 and Figure 6.

Results of the post-development BAL contour assessment are detailed in Table 5 and depicted in Figure 8. Results indicate that the highest BAL rating applicable to proposed habitable development is BAL-29. The 21 m wide APZ proposed along the northern interface will be of sufficient width to buffer the proposed BFM from the BAL-40/FZ impacts of the adjacent Class A forest revegetation within the POS buffer.

**Table 5: Indicative BAL contour assessment results** 

Vegetation plot	Vegetation classification	Effective slope	Separation distance to proposed/potential habitable development	Highest BAL
1	Class A Forest	Flat/upslope (0°)	21 m	BAL-29
2	Class B Woodland	Flat/upslope (0°)	41 m	BAL-12.5
3	Class D Scrub	Flat/upslope (0°)	44 m	BAL-12.5
4	Class G Grassland	Downslope >10–15°	12 m	BAL-29
5	Class G Grassland	Flat/upslope (0°)	12 m	BAL-19
6	Excluded – Clause 2.2.3.2 [d]	N/A	N/A	N/A
7	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A
8	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A







### 4. Identification of bushfire hazard issues

### 4.1 Bushfire context

The predominant bushfire risk to the project area is from the surrounding rural land and associated grassland hazard, which has the potential to impact the site with low levels of radiant heat and ember attack, particularly in regard to potential spotting within the proposed Class A forest POS revegetation. This risk is deemed readily manageable in consideration of the short fire runs, substantial fragmentation of the fuel by roads and developed areas and control measures designed into the subject planning proposals as per standard Guideline acceptable solutions, including response through the internal 21 m wide APZ, existing perimeter roads (i.e., Bussell Highway, Coomidup Boulevard and Napoleon Promenade), associated separation and reticulated water accessibility.

The area of Class B woodland and Class D scrub west of the project area is limited in size and potential fire run and is not expected to result in elevated levels of radiant heat and ember attack exposure. The existing defendable space provided in the form of mineral earth tracks and Buayanup Drain is expected to be able to provide sufficient separation resulting in reduction in the level of radiant heat exposure.

The existing urban development throughout Vasse to the east, west and south of the project area, combined with the proposed extent of town centre development resulting from the subject proposals is expected to provide a significant reduction in the capacity for bushfire spread, escalation and impact to life and property in the locality.

Strategen-JBS&G considers that the bushfire risk to proposed development posed by the abovementioned hazards can be managed through standard application of acceptable solutions under the Guidelines, as well as through a direct bushfire suppression response if required.

### 4.2 Bushfire hazard issues

On completion, the subject proposals will result in a predominant non-vegetated and low threat built and landscaped outcome with limited bushfire risk exposure, where BAL-29 or lower is readily achievable for proposed habitable development in accordance with acceptable solution A1.1 (see Figure 8). In recognition of the potential for the northern POS buffer to be revegetated with Class A forest, a precautionary 21 m wide APZ has been designed and incorporated into the planning, landscaping and built form outcome of the subject proposals to achieve compliant siting of development in areas of BAL-29 or lower in accordance with acceptable solution A2.1.

The project area is bound by public roads to the south, east and north and will be serviced by a compliant cul-de-sac linking with Coomidup Boulevard, which provides vehicular access north and south to the broader public road network in accordance with acceptable solution A3.1. The proposed cul-de-sac is unavoidable given direct access is constrained to the west, south and north by the existing Buayanup Drain, Napoleon Promenade and Bussell Highway corridors respectively. Furthermore, the proposed cul-de-sac will not be situated in a designated bushfire prone area and is fully compliant in accordance with acceptable solution A3.3.

Reticulated water will be provided for proposed development and the existing street hydrant network will be utilised as required in accordance with acceptable solution A4.1.

Based on the above management strategy, Strategen-JBS&G considers the bushfire hazards within and adjacent to the project area and the associated bushfire risks are readily manageable through adoption and application of standard acceptable solution management responses, as outlined in the bushfire protection criteria of the Guidelines.



### 5. Assessment against the bushfire protection criteria

### 5.1 Compliance table

An acceptable solutions assessment against the bushfire protection criteria is provided in Table 6.

Table 6: Compliance with the bushfire protection criteria of the Guidelines

Method of compliance	Burnell of Comment of the Comment of
Acceptable solutions	Proposed bushfire management strategies
A1.1 Development location	The post-development BAL contour assessment (Figure 8) indicates that on completion of development, any habitable development within the project area will achieve BAL-29 or lower. In this regard, proposed development complies with acceptable solution A1.1.
A2.1 Asset Protection Zone	In recognition of the potential for the northern POS buffer to be revegetated with Class A forest, a precautionary 21 m wide APZ has been designed and incorporated into the planning, landscaping and built form outcome of the subject proposals to achieve compliant siting of development in areas of BAL-29 or lower. The APZ and all low threat landscaping is to be established and maintained in accordance with Schedule 1 of the Guidelines (Appendix B). In this regard, proposed development complies with acceptable solution A2.1.
A3.1 Two access routes	The project area will be serviced by an unavoidable compliant cul-de-sac with direct connection to Coomidup Boulevard, which provides two access routes, one to the north (through to Bussell Highway) and one to the south (through to Napoleon Promenade). In this regard, proposed development complies with acceptable solution A3.1.
A3.2 Public road	All public roads constructed as part of the development will be required to comply with the relevant technical requirements of the Guidelines (Appendix C). In this regard, proposed development complies with acceptable solution A3.2.
A3.3 Cul-de-sac (including a	The proposed cul-de-sac is unavoidable (as stated in Section 4.2) and will comply with the relevant technical requirements of the
dead-end-road)	Guidelines (Appendix C). In this regard, proposed development complies with acceptable solution A3.3.
A3.4 Battle-axe	N/A No battle-axes are proposed as part of the development and the project area is not serviced by an existing battle-axe.
A3.5 Private driveway longer than 50 m	N/A It is not anticipated that any private driveways longer than 50 m from a public road will be established as part of proposed development.
A3.6 Emergency access way	N/A No emergency access ways are proposed or required as part of the development.
A3.7 Fire service access routes (perimeter roads)	N/A No fire service access routes are proposed or required as part of the development.
A3.8 Firebreak width	N/A The project area will ultimately comprise a fully built/landscaped footprint such that a firebreak will not be required.
A4.1 Reticulated areas	The proposed development will be connected to a reticulated water supply in accordance with Water Corporations Design Standard 63 requirements, which will meet the technical requirements of the Guidelines specified in Appendix D. In this regard, proposed development can comply with acceptable solution A4.1.
A4.2 Non-reticulated areas	N/A – the project area is located within an existing reticulated area.
A4.3 Individual lots within non- reticulated areas (Only for use if creating 1 additional lot and cannot be applied	N/A – the project area is located within an existing reticulated area.
	Acceptable solutions A1.1 Development location A2.1 Asset Protection Zone A3.1 Two access routes  A3.2 Public road  A3.3 Cul-de-sac (including a dead-end-road) A3.4 Battle-axe A3.5 Private driveway longer than 50 m A3.6 Emergency access way A3.7 Fire service access routes (perimeter roads) A3.8 Firebreak width A4.1 Reticulated areas A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and



### 5.2 Additional management strategies

### 5.2.1 On-site staging buffers

If development is to occur on a staged basis, slashing throughout 50 m wide low threat staging buffers will need to occur to ensure habitable development is not inhibited by a temporary grassland extent located on an adjacent undeveloped stage. Slashing of grasses/weeds within the buffer is required to achieve a vegetation height of 100 mm in accordance with exclusion clause 2.2.3.2 (f) and Schedule 1 APZ standards of the Guidelines (Appendix B).

### 5.2.2 Fuel management within cleared vacant lots

Cleared vacant lots are to be managed on a regular and ongoing basis by the developer until sale of lots after which time landowners will be responsible for ongoing management. Maintenance is to be in accordance with Clause 2.2.3.2 (f) of AS 3959 and Schedule 1 of the Guidelines (refer to Appendix B) and will involve slashing/mowing of grassland and weeds to a height of less than 100 mm.

### 5.2.3 Road verge fuel management

Existing and proposed road verges that have been excluded as low threat are to be managed to ensure the understorey and surface fuels remain in a low threat, minimal fuel condition in accordance with Clause 2.2.3.2 (f) of AS 3959.

### 5.2.4 BMP compliance assessment

A BMP compliance report will be prepared prior to issue of title to validate and confirm that relevant management measures of this BMP have been implemented appropriately to achieve the intended bushfire management outcomes and compliance with bushfire protection criteria.

### 5.2.5 Landscaping plan

Detailed landscaping plans will need to be prepared to ensure areas of POS are landscaped to the expected standards specified in this BMP, particularly with regards to any low threat landscaping, Class A forest revegetation and the 21 wide low threat APZ.

As previously mentioned, should it be determined through detailed landscaping design that a Class A forest classification does not represent the proposed landscaping outcome within the northern POS buffer and that a reduced classification is more appropriate (i.e. Class B woodland, Class D scrub, Class C shrubland, Class G grassland and/or exclusion under Clause 2.2.3.2 of AS3959), then the APZ could be reduced accordingly via updated BAL assessment.

### 5.2.6 Compliance with annual firebreak notice

The developer/land manager and prospective land purchasers are to comply with the current City of Busselton annual firebreak notice as amended (refer to Appendix E).



### 6. Responsibilities for implementation and management of the bushfire measures

Implementation of the BMP applies to the developer and prospective landowners to ensure bushfire management measures are adopted and implemented on an ongoing basis. A bushfire responsibilities table is provided in Table 7 to drive implementation of all bushfire management works associated with this BMP.

Table 7: Responsibilities for implementation and management of the bushfire measures

	Implementation/management table
	Developer – prior to issue of titles
No.	Implementation action
1	Construct (or have works bonded) the public road/cul-de-sac and reticulated water supply to the standards stated in this BMP.
2	Prepare detailed landscape plans to ensure proposed POS and landscaping achieves the standards specified in this BMP.
3	Establish the APZ and all other low threat areas (e.g. development footprint, staging buffers, low threat landscaping, etc) to the standards stated in this BMP and in accordance with the relevant detailed landscape plans where applicable.
4	Comply with the City's annual firebreak notice, as amended.
5	Undertake BMP compliance assessment.
	Developer – until sale/transfer of lots
No.	Implementation action
1	Maintain any low threat areas (e.g. APZ, development footprint, staging buffers, low threat landscaping, etc) to the standards stated in this BMP.
2	Comply with the City's annual firebreak notice, as amended.
	Landowner/occupier – prior to building construction and ongoing
No.	Implementation action
1	Maintain any low threat areas (e.g. cleared vacant lots) to the standards stated in this BMP.
2	Comply with the City's annual firebreak notice, as amended.



### 7. References

- Department of Fire and Emergency Services (DFES) 2021, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from: <a href="https://maps.slip.wa.gov.au/landgate/bushfireprone/">https://maps.slip.wa.gov.au/landgate/bushfireprone/</a>, [18/08/2021].
- Department of Planning (DoP) 2016, Visual guide for bushfire risk assessment in Western Australia, Department of Planning, Perth.
- Hargreaves Design Group, *Proposed Site Plan Overall, Vasse Village by Bunbury Farmers Market Lot* 124 Coomidup Boulevard Vasse WA 6280, plan prepared for GDH Enterprises Pty Ltd, November 2021.
- HatchRobertsDay 2021a, Vasse Village Precinct Structure Plan (Plan 1), plan prepared 11 May 2021.
- HatchRobertsDay 2021b, *Subdivision Plan Vasse Village Centre Stage 2a*, plan prepared 29 September 2021.
- Standards Australia (SA) 2018, Australian Standard *AS 3959–2018 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.
- Western Australian Planning Commission (WAPC) 2015, State Planning Policy 3.7 Planning in Bushfire Prone Areas, Western Australian Planning Commission, Perth.
- Western Australian Planning Commission (WAPC) 2017, *Guidelines for Planning in Bushfire Prone Areas, Version 1.3 August 2017*, Western Australian Planning Commission, Perth.



### 8. Limitations

### Scope of services

This report ("the report") has been prepared by Strategen-JBS&G in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen-JBS&G. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

### Reliance on data

In preparing the report, Strategen-JBS&G has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen-JBS&G has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen-JBS&G has also not attempted to determine whether any material matter has been omitted from the data. Strategen-JBS&G will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen-JBS&G. The making of any assumption does not imply that Strategen-JBS&G has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen-JBS&G disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

### **Environmental conclusions**

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

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### Appendix A Vegetation plot photos and description





Photo ID: 1a (background)

Plot number		Plot 1
Vegetation	Pre-development	Class B Woodland
classification	Post-development	Class B Woodland
Description / justification		Vegetation dominated by sparse peppermints over grass.









Photo ID: 3a (foreground embankment)







Photo ID: 3b (foreground embankment)

Plot number		Plot 3
Vegetation	Pre-development	Class G Grassland
classification	Post-development	Class G Grassland
Description / justification		Unmanaged grass greater than 100 mm in height.







Photo ID: 4a	
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Photo ID: 4c		Photo ID: 4d	
Plot number		Plot 4	
Vegetation classification	Pre-development	Class G Grassland	
	Post-development	Class G Grassland	
Description / justification		Unmanaged grass greater than 100 mm in height.	
		·	



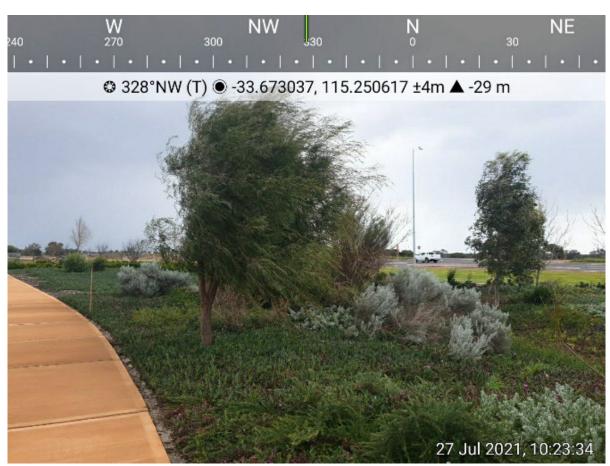


Photo	<b>ID</b> : 5a	
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Plot number		Plot 5		
Vegetation Pre-development classification Post-development		Excluded – Clause 2.2.3.2 [d]		
		Excluded – Clause 2.2.3.2 [d]		
Description / justification		Narrow strip of entry landscaped vegetation to the northeast, less than 20 m in		
		width and greater than 20 m from the project area and other areas of classified		
		vegetation.		









Photo ID: 6a **©** 70°NE (T) **●** -33.674273, 115.248349  $\pm$ 8m  $\blacktriangle$  -27 m 27 Jul 2021, 10:28:14



Photo ID: 6c 27 Jul 2021, 10:27:02

Photo ID: 6e

Photo ID: 6d

Plot number		Plot 6	
Vegetation classification	Pre-development	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2	
		[e] and [f])	
	Post-development	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2	
		[e] and [f])	
Description / justification		Non-vegetated areas (i.e. footpaths, buildings, roads, water	
		bodies) and low threat vegetation (i.e. grass maintained	
		below 100 mm in height with enforceability for ongoing	
		maintenance, landscaped and managed POS, manicured	
		lawns, residential gardens, etc).	

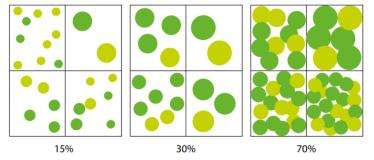


# Appendix B APZ standards (Schedule 1 of the Guidelines)



### **Schedule 1: Standards for Asset Protection Zones**

- **Fences:** within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- **Fine Fuel load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- Trees (> 5 metres in height): trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.



- Shrubs (0.5 metres to 5 metres in height): should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m2 in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- **Ground covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- Grass: should be managed to maintain a height of 100 millimetres or less.



# Appendix C Vehicular access technical standards of the Guidelines



Acceptable solution A3.2	A public road is to meet the requirements in Table 1, Column 1.		
Explanatory note E3.2	Trafficable surface: Widths quoted for access routes refer to the width of the trafficable surface. A six metre trafficable surface does not necessarily mean paving width. It could, for example, include four metre wide paving one metre wide constructed road shoulders. In special circumstances, where eight lots or less are being serviced, a public road with a minimum trafficable surface of four metres for a maximum distance of 90 metres may be provided subject to the approval of both the local government and Department of Fire and Emergency Services. Public road design: All roads should allow for two-way traffic to allow conventional two-wheel drive vehicles and fire appliances to travel safely on them.		



### Cul-de-sac (including a dead-end road) Acceptable solution A3.3 A cul-de-sac and/ or a dead end road should be avoided in bushfire prone areas. Where no alternative exists (i.e. the lot layout already exists and/ or will need to be demonstrated by the proponent), the following requirements are to be achieved: Requirements in Table 1, Column 2 Maximum length: 200 metres (if public emergency access is provided between cul-desac heads maximum length can be increased to 600 metres provided no more than eight lots are serviced and the emergency access way is no more than 600 metres) Turn-around area requirements, including a minimum 17.5 metre diameter head. Explanatory note E3.3 In bushfire prone areas, a cul-de-sac subdivision layout is not favoured because they do not provide access in different directions for residents. In some instances it may be possible to provide an emergency access way between cul-de-sac heads to a maximum distance of 600 metres, so as to achieve two-way access. Such links must be provided as right of ways or public access easements in gross to ensure accessibility to the public and fire services during an emergency. A cul-de-sac in a bushfire prone area is to connect to a public road that allows for travel in two directions in order to address Acceptable Solution A3.1. 17.5 m diameter Cul-de-sac 12-20 m Maximum length 200 m



Table 1	1	2	3	4	5
Technical requirement	Public road	Cul-de-sac	Private driveway longer than 50 m	Emergency access way	Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal distance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 m	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius	8.5	8.5	8.5	8.5	8.5
* Refer to E3.2 Public roads: Trafficable surface					



# Appendix D Water technical standards of the Guidelines



Reticulated areas				
Acceptable solution A4.1	The subdivision, development or land use is provided with a reticulated water supply in accordance with the specifications of the relevant water supply authority and Department of Fire and Emergency Services.			
Explanatory note E4.1	Water supply authorities in Western Australia include the Water Corporation, Aqwest and the Busselton Water Board.  The Water Corporation's 'No. 63 Water Reticulation Standard' is deemed to be the baseline criterion for developments and should be applied unless local water supply authorities' conditions apply.			



### Appendix E City of Busselton Firebreak Notice

### **PERMITS TO BURN**

**Permits to Burn** are required for the whole of the Restricted Burning Times and can only be obtained from the Fire Control Officer for your area

A list of Fire Control Officers is available on the **Fire and Emergency Services** page on the City's website

Most of our Fire Control Officers are volunteers, make sure you **plan ahead** if you intend to apply for a Permit to Burn

A Permit to Burn must be obtained before any burning takes place and the permit holder **must be in possession** of the permit throughout the duration of the burn

The permit holder shall ensure **all conditions** of the permit, as shown on the permit, are **fully complied** with

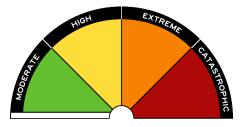
### **NOTIFY DFES COMMUNICATIONS CENTRE**

**DFES Communications Centre (9395 9209)** are to be advised whenever the holder of a permit **commences burning**; and/or whenever a person is carrying out burning activities **outside of the Prohibited and Restricted Burning Times** 

### HARVEST VEHICLE MOVEMENT BANS

The City may declare **Harvest Vehicle Movement Bans** (HVMBs) at any time. For further information or to receive notification of HVMBs please visit the **Fire and Emergency Services** page on the City's website

The new Australian Fire Danger Rating System



Moderate: plan and prepare

High: be ready to act

Extreme: take action now to protect life and property

Catastrophic: for your survival, leave bushfire risk areas

### **GENERAL INFORMATION**

**Burning of Garden Refuse:** pursuant to section 24G(2) of the *Bush Fires Act 1954*, the burning of garden refuse is prohibited throughout the District during Prohibited Burning Times, and prohibited in urban areas of the District during Restricted Burning Times

During Restricted Burning Times, a Permit to Burn is required for the burning of garden refuse in Rural Residential or Rural areas

Camping and/or Cooking Fires: pursuant to section 25(1a) of the *Bush Fires Act 1954*, the lighting of fires in the open for the purpose of camping and/or cooking is prohibited throughout the District during Prohibited Burning Times

The lighting of fires in the open for the purpose of camping and/or cooking is prohibited at all times when the **Fire Danger Rating** for the District is \***High or above** without the written approval of the City

**Fire Pits, Chimineas, and/or Braziers:** the lighting of fire pits, Chimineas and/or braziers is prohibited during Prohibited Burning Times, and otherwise prohibited if the **Fire Danger Rating** for the District is \***High or above** 

Conditions for the Lighting and Extinguishing of Fires in the Open: when burning garden refuse; or lighting camping and/or cooking fires; or when lighting fire pits, Chimineas and/or braziers the space of ground around the site of the fire, having a radius of at least 3 metres from the site at the centre, shall be clear of all vegetation and other flammable materials

The person who lit the fire, or a person left in attendance at the fire as the case may be, shall completely extinguish the fire by the application of water and/or earth before that person leaves the site unattended

\*The new Australian Fire Danger Rating System (AFDRS) will go live on 1 September 2022. The Australia wide system uses current science that significantly improves the ability to predict fire behaviour

Work is underway at a State level to amend legislation to reflect the new AFDRS. Importantly, these changes will not affect the requirement for landowners or occupiers of land to fully comply with this Notice

For more information about the AFDRS visit

www.afac.com.au/initiative/afdrs

### **KEY DATES**

Dates may change due to seasonal fire conditions in which case details will be published in local newspapers and on the City's website

### PROHIBITED BURNING TIME

(BURNING IN THE OPEN IS PROHIBITED)

1 December 2022 to 28 February 2023

### RESTRICTED BURNING TIMES

(BURNING PERMITS ARE REQUIRED)

15 October 2022 to 30 November 2022 and 1 March 2023 to 30 April 2023 (Burning on Public Holidays Prohibited)

### **COMPLIANCE DATES**

Rural Residential / Urban / Industrial Land

Compliance with this Notice must be achieved no later than 15 November 2022 and maintained until 30 April 2023

### Rural Land

Compliance with this Notice must be achieved no later than 15 December 2022 and maintained until 30 April 2023

### FIREBREAK INSPECTIONS AND RIGHT OF ENTRY

The City will commence its annual firebreak inspection program on 15 November 2022

Rangers are appointed Bush Fire Control Officers under the provisions of the *Bush Fires Act 1954* and carry out annual inspections

Under the provisions of the Act, Bush Fire Control
Officers may in the performance of their duties, enter
any land or building including private property

### FIREBREAK VARIATIONS

Where there are valid environmental and/or onground considerations that prevent full compliance with this Notice, landowners may apply to the City for a firebreak variation. A variation must be lodged in writing on an Application for Variation form that is available on the City's website.

Applications for variation must be submitted by 31 October 2022



### FIREBREAK AND FUEL HAZARD REDUCTION NOTICE

2022/2023 BUSH FIRE SEASON

**FIRST AND FINAL NOTICE** 

Take notice that pursuant to Part 3 Division 6 Section 33 of the *Bush Fires Act 1954*, landowner(s) or occupier(s) of land shall construct firebreaks and carry out fire prevention work in accordance with this Notice

Failure to comply with this Notice may result in a fine of up to

\$5,000

This year the City will be prioritising the inspection of properties that were issued Work Orders during the 2021/2022 bush fire season

Should you require assistance or clarification of the requirements of this Notice, please contact the City's Ranger Services on 9781 0444

### **CATEGORY** It is the land owner's responsibility to identify the category that relates to their В C D property and to ensure the necessary fire prevention works are completed on time. Please contact the City if you are unsure of your category. **CATEGORY 1** RURAL Except plantations and vineyards (for tourist chalets, refer to Estate Fire Management Plan or Individual Fire Management Plan) Sections A, C and D apply to this category. **CATEGORY 2** URBAN RESIDENTIAL & INDUSTRIAL -COMMERCIAL Sections A, B, D and E1 Trees, apply to this category. Refer to section E - Interpretation and Additiona Requirements (E1 Trees). **CATEGORY 3 & 4 PLANTATIONS** Fire Management Plan applies N/A N/A **CATEGORY 5** PROTEA PLANTATIONS / VINEYARDS (For tourist chalets, refer to Estate Fire Management Plan or Individual Fire Management Plan) Sections A, B, C and D apply to this category. **CATEGORY 6 RURAL RESIDENTIAL - LOTS WITH INDIVIDUAL** (MINERAL EARTH) BOUNDARY BREAKS Sections A, B, C and D apply to this category unless the property is subject to Estate Fire Management Plan or Individual Fire Management Plan **CATEGORY 7** RURAL RESIDENTIAL - LOTS WITH A STRATEGIC FIREBREAK ON ONE OR MORE BOUNDARIES Sections A, B, C and D apply to this category unless the property is subject to Estate Fire Management Plan or Individual Fire Management Plan **CATEGORY 8 RURAL RESIDENTIAL - LOTS WITHIN A STRATEGIC** FIREBREAK AREA WITH NO STRATEGIC FIREBREAKS ON THE LOT BOUNDARIES Sections B. C and D apply to this category unless the property is subject to Estate Fire Management Plan or dividual Fire Management Plan

### FIREBREAK CATEGORY CODE AND SUMMARY OF REQUIREMENTS

ALL REQUIREMENTS IN THIS NOTICE ARE TO BE MAINTAINED THROUGHOUT THE

**ENTIRE DURATION OF THE FIRE SEASON** 

**FAILURE TO COMPLY MAY RESULT IN A \$5,000 FINE** 

PLEASE BE ADVISED THAT YOUR PROPERTY MUST COMPLY WITH CATEGORY REQUIREMENTS AS NOTED BY A TICK IN COLUMN A, B, C OR D



A - Firebreak — The term firebreak includes a mineral earth firebreak. A mineral earth firebreak means a 3 metre wide area of the owner(s)/occupiers(s) land, cleared and maintained totally clear of all vegetation material (living or dead) so there is only mineral earth left. Any overhanging trees and other vegetation must be pruned to a height of 5 metres above the ground level of a mineral earth firebreak.

Category 1 – Rural: A mineral earth FIREBREAK shall be constructed 3 metres wide, except in pasture or crop areas where a FIREBREAK shall be 2 metres wide. FIREBREAKS shall be located adjacent to all external boundaries of the land. Where the land area exceeds 120 hectares, an additional FIREBREAK must divide the land into areas of not more than 120 hectares with each part completely surrounded by a FIREBREAK.

Category 2 - Urban Residential and Industrial-Commercial: Where the area of land exceeds 2024m² (½ acre) a mineral earth FIREBREAK shall be constructed and maintained at least 3 metres wide and within 6 metres of the inside of all external boundaries of the land. Where the area of land is 2024m² (½ acre) or less, hazardous material must be removed in accordance with section B - Fuel Reduction (refer to B1).

Category 5 - Protea Plantations/Vineyards: A mineral earth FIREBREAK shall be 3 metres wide. A low fuel area is to be maintained in accordance with section B - Fuel Reduction (refer to B2).

Category 6 and 7 - Rural Residential: A mineral earth FIREBREAK shall be constructed 3 metres wide. On Category 6 Rural Residential land with pasture or crop, a FIREBREAK shall be 2 metres wide and located within 6 metres of all external boundaries of the land. For Category 7 Rural Residential land, free access along a Strategic FIREBREAK is to be maintained at all times and including across the boundary of a lot, by means of a 3.5 metres wide field gate in the adjoining lot boundary fence.

### **B** - Fuel Reduction

- 1) Category 2 Urban Residential and Industrial-Commercial: Where the area of land is 2024m<sup>2</sup> (½ acre) or less, ALL HAZARDOUS MATERIAL must be removed from the whole of the land except living trees. In the area remaining, vegetation is to be maintained to a height of no greater than 10 centimetres; this includes piles of timber, branches and other vegetation. Trees shall be pruned in accordance with section E Interpretation and Additional Requirements (refer to E1).
- 2) Category 5 Protea Plantations/Vineyards: A 5 metre low fuel area is to be maintained between the 3 metre FIREBREAK and the plantation/vineyard area. In this area, vegetation is to be maintained to a height of no greater than 10 centimetres; this includes piles of timber, branches and other vegetation.
- 3) Category 6, 7 and 8 Rural Residential: Parkland clearing must be carried out in all open paddocks and along the boundary of the property. Clearing means that all dead vegetation and dry grasses (excluding approved crops, pasture areas and living trees/shrubs) including piles of timber and disused materials must be maintained to a height of no greater than 10 centimetres.

### C - Building Protection Zones (BPZ) - This is a modified area of reduced fuel immediately surrounding a building

BPZ's starve the fire by reducing the fuel levels around your house. These requirements are designed to reduce the fire's intensity and minimise the likelihood of flame contact with buildings. The BPZ gives more protection to families should a fire threaten suddenly and they cannot leave. It also provides extra protection for fire fighters and property owners who may decide to stay with their property.

A BPZ shall be provided for buildings in bush fire prone areas. The surroundings of buildings must comply with the following requirements:

- 1) The BPZ for existing buildings must be at least 20 metres from any external wall of the building unless varied under an approved Fire Management Plan (FMP) in accordance with section E Interpretation and Additional Requirements (refer to E4).
- 2) The minimum BPZ for buildings constructed after 1 November 2011, in all cases shall be 25 metres.
- 3) The BPZ must be located within the boundary of the lot that the building is situated on.
- 4) Hazardous/flammable materials must not exceed the maximum fuel load specified in Point 5 below with grass areas not exceeding a height greater than 10 cm.
- 5) Fuel loads must be reduced and maintained at 2 tonne per hectare.
- 6) Isolated trees and shrubs may be retained, however, the first 5 metres around all buildings is to be clear of all hazardous/flammable materials.
- 7) Reticulated gardens in the BPZ shall be maintained to a height of no greater than 500 millimetres.
- 8) Wood piles must be at least 10 metres away from habitable dwellings.
- 9) Trees in the BPZ must comply with section E Interpretation and Additional Requirements (refer to E1).
- 10) Where the land has an approved FMP, compliance must be achieved in accordance with the FMP. The FMP may vary the above BPZ requirements.
- 11) A Hazard Separation Zone (HSZ) is also recommended in the absence of a Fire Management Plan. Section E Interpretation and Additional Requirements (refer to E3).

### **D – Fuel Storage & Haystack Protection Zones**

A 3 metre mineral earth FIREBREAK shall be located within 6 metres of fuel storage tanks, sheds, gas cylinders and haystacks. The mineral earth firebreak shall be maintained so that it is totally clear of all material (living or dead).

### **E – Interpretation and Additional Requirements**

- 1) <u>Trees</u> On **Urban, Industrial, Rural,** and **Rural Residential** land, all tree branches must be removed or pruned to ensure a clear separation of at least **3 metres** back from the eaves of all buildings and **5 metres** above the top of the roof. Branches that may fall on the house must also be removed. In the **BPZ** the following is 'recommended'; the spacing of individual or groups of trees should be 15 metres apart to provide for a 5 metres separation between tree crowns. There is also a requirement of 2.5 metres between trees and power lines so they do not come into contact and start a fire or bring down a power line.
- 2) Hazardous and Flammable Materials means the accumulation of fuel including burn piles (living or dead) such as leaf litter, twigs, trash, bush, dead trees and scrub capable of carrying a running fire, but excludes standing living trees and isolated shrubs. NOTE: All remaining vegetation, piles of timber, branches and other living vegetation must be maintained to a height of no greater than 10 centimetres. To measure and determine fuel loads use DFES's Visual Fuel Load Guide at <a href="http://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/pages/publications.aspx#5">http://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/pages/publications.aspx#5</a> and select Visual Fuel Load Guide Swan Coastal (Part 1 & 2). Surface bush fire fuels should be kept low to the ground.
- 3) Hazard Separation Zones (HSZ) A HSZ is a modified area of reduced fuel load outside of the BPZ and is recommended to assist in reducing the fires intensity when flames are approaching buildings. Both the BPZ and the HSZ are essential strategies for the protection of buildings. A HSZ covers the area 75 metres outside the BPZ.

The HSZ should be modified to have a maximum fuel load of 6-8 tonne per hectare. This can be implemented by fuel reduction methods such as burning, mowing and slashing to remove the hazard. This should not require the removal of living trees or shrubs. **REMEMBER:** reduce the fuel level of the fire to lower the intensity of the blaze. Further information on fuel loading can be found in the *Visual Fuel Load Guide* available by calling DFES or via their website at <a href="https://www.dfes.wa.gov.au">www.dfes.wa.gov.au</a>

4) Fire Management Plan (FMP) A FMP is a comprehensive plan for the prevention and control of bushfires which may apply to individual land holdings. A notification, pursuant to the Transfer of Land Act 1893 (as amended) may be placed on the Certificate(s) of Title of the land for medium to long term fire management to reduce the occurrence and minimise the impact of uncontrolled bush fires, thereby reducing the threat to life, property and the environment. The land owner must comply with the FMP. Building in bush fire prone areas, new dwellings and other forms of accommodation, as well as additions to existing buildings are to be constructed in accordance with in Australian Standard 3959-2009. In designated bush fire prone areas, the minimum BPZ in all cases shall be 25 metres. Further information on this and other information relating to fire safety issues can be found on the City's website www.busselton.wa.gov.au



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### **Document Status**

Report version		Purpose	Author	Reviewed and Approved for Issue	
	Rev No.			Name	Date
Draft Report	Rev A	For review by client	Kaitlin Southgate	Zac Cockerill (BPAD 37803, Level 2)	7 October 2021
Final Report	Rev 0	Issued for use: to accompany Precinct Structure Plan amendment and Stage 2a subdivision application	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	15 October 2021
Final Report	Rev 1	Issued for use: to accompany Precinct Structure Plan amendment, Stage 2a subdivision application and Vasse Village by Bunbury Farmers Market JDAP application	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	2 December 2021
Final Report	Rev 2	Issued for use: updated to address WAPC Schedule of Modifications on the Precinct Structure Plan	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	31 October 2022

### HATCH | RobertsDay