# Rise Urban

Lot 442 Moores Road, West Pinjarra

Structure Plan





## Lot 442 Moores Road, West Pinjarra

## **Structure Plan – Part 1 Implementation Report**



Prepared for:	Aigle Royal Developments and Mainmode Pty Ltd		
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Job Code:	1012022		
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Issue No:	3 – Final Including WAPC Modifications		
Date:	4 September 2023		



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Rise Urban Pty Ltd, 2022.



This Structure Plan is prepared under the provisions of the Shire of Murray Local Planning Scheme No.4

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

#### 06 December 2023

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

An officer of the Commission duly authorized by the Commission pursuant to section 24 of the Planning and Development Act 2005 for that purpose, in the presence of:

11 Witness:

Date: 12 December 2023

Expiry Date: <u>12 December 2033</u>



## **Table of Amendments**

Amendment Number	Summary of the Amendment	Amendment Type	Date approved by the WAPC



## **Executive Summary**

The Lot 442 Moores Road Structure Plan has been prepared to guide the subdivision and development of approximately 22.6 hectares of land on Lot 442 Moores Road, West Pinjarra, within the Shire of Murray.

The Structure Plan has been prepared for Aigle Royal Developments (the proponent) on behalf of the landowner ("Mainmode Pty Ltd") and in collaboration with the Shire of Murray. The Structure Plan expands upon the work previously undertaken to facilitate Scheme Amendment 312 to rezone the subject land from 'Rural' to 'Special Rural'.

The Structure Plan is informed by additional technical reporting and analysis prepared by the following specialist consultant team:

- Aigle Royal Project coordination
- Rise Urban Town planning
- Emerge Associates Bushfire
- Shawmac Civil engineering and hydrology
- Western Environmental Foreshore Management Plan
- LD Total Revegetation and Landscape

The Lot 442 Moores Road Structure Plan provides an overarching planning framework to guide and facilitate the development of the Structure Plan area for rural residential purposes, and has been prepared in accordance with the requirements of the *Planning and Development (Local Planning Schemes) Regulations 2015* and Schedule 4 of the Shire of Murray Local Planning Scheme No.4.

The plan provides for more consolidated and consistent land use in the context of the surrounding area, whilst delivering triple bottom line sustainability outcomes in accordance with the State and Local Government policy requirements.

## **Project Overview**

The Lot 442 Moores Road Structure Plan creates a framework for a future rural residential development which will ultimately house in the vicinity of 25 to 30 people, as well as providing an opportunity to enhance native species revegetation on-site.

The Structure Plan recognises the unique location and surrounding rural/rural residential land use context. The Structure Plan generally aligns with the strategic planning objectives identified in the Shire of Murray's Local Rural Strategy (Addendum 2), which identifies the Local Structure Plan area as being suitable for small lot rural residential development, typically comprising 2-4ha.

The Structure Plan responds to the desired pattern of subdivision for the area, and supports a rural residential density of 1 dwelling per 2ha to ultimately deliver approximately 11 rural residential dwellings.

The Structure Plan area is currently serviced by power and water infrastructure located within the adjacent Curtis Lane reserve, and subject to the installation of a new 315kVA transformer, there is sufficient capacity in the existing network to accommodate the additional demand.



The Structure Plan area is not currently connected to reticulated sewer, and will be serviced by a secondary wastewater treatment system to the requirements of the Shire of Murray and Department of Health, and in accordance with the Government Sewerage Policy.

NBN access is available via the Fixed Wireless network, however an application to NBN at the time of subdivision will determine if additional infrastructure is required.

This report comprehensively addresses all relevant planning considerations and demonstrates that the land is suitable for rural residential development in the form proposed.

Table 1 below sets out an indicative land use summary based on the Structure Plan map provided at Plan A, and the Concept Plan contained within the explanatory report.

#### Table 1 – Land Use Summary

Item	Data
Structure Plan Area	22.6ha
Area of each land use proposed:	
Zones (as per LPS4): - Special Rural	22.6ha
Estimated number of dwellings	11
Estimated population	25-30 people



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## 1.0 Structure Plan Area

The Lot 442 Moores Road Structure Plan area applies to the land contained within the inner edge of the line denoting the Structure Plan boundary shown on the Structure Plan Map (Plan A: Structure Plan Map), and comprises all of Lot 442 Moores Road, West Pinjarra.

Once endorsed, the Structure Plan will become the guiding document in the consideration of future subdivision and development.

### 2.0 Structure Plan Content

This Structure Plan comprises:

- Part One Implementation Section
- Part Two Explanatory Report
- Appendices Technical Reports

Part One of the Structure Plan comprises the Structure Plan Map and planning provisions including zoning, subdivision and development controls. Part Two of the Structure Plan is the planning report component which can be used to interpret and implement the requirements of Part One.

## 3.0 Operation

This Structure Plan comes into effect on the date that it is endorsed by the Western Australian Planning Commission (WAPC) and expires ten years from the date that it is endorsed by the WAPC unless amended otherwise.

## 4.0 Interpretation and Relationship with the Statutory Planning Framework

This Structure Plan constitutes a structure plan pursuant to the Shire of Murray Local Planning Scheme 4 and Schedule 2 - Deemed Provisions for local planning schemes of the *Planning and Development (Local Planning Schemes) Regulations 2015.* 

The Structure Plan Map (Plan A) outlines land uses and zones applicable within the Structure Plan area.

Pursuant to Schedule 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015*, a decision maker of an application for development approval or subdivision approval is to have due regard to the provisions of this Structure Plan, including the Structure Plan Map, Implementation Report, Explanatory Report and any Technical Appendices.

## 5.0 Staging

Development staging will follow an orderly sequence and shall not exceed the extension of essential service infrastructure or constructed road access.



## 6.0 Land Use and Subdivision

#### 6.1 Subdivision and Development Requirements

The subdivision and development of land is to be generally in accordance with the Structure Plan.

#### 6.2 Lot Size and Configuration

The minimum lot size shall be 2.0 hectares.

#### 6.3 Protection of Environmental Features

In order to conserve the landscape, trees and other indigenous vegetation shall not be felled or cleared without the prior written approval of the Council, except where required for the erection of a single house, outbuildings, effluent disposal system, access ways, fences, firebreaks and other fire management requirements in accordance with an approved Bushfire Management Plan.

#### 6.4 Building Envelopes

Prior to the subdivision of the land, a detailed plan shall be prepared indicating the dimensions and suitable position of a building envelope for each proposed lot. Each building envelope shall have a maximum area of 2000m<sup>2</sup>. Building envelope plans are to provide setbacks from water resources for Secondary Treatment Systems discharge areas along with 1.5m vertical separation level from maximum ground water level.

#### 6.5 Fill Levels

Fill levels of building envelopes will be determined on a lot by lot basis with consideration to the following where applicable:

- a) Depth to maximum ground water level;
- b) Flood levels; and
- c) The installation requirements of secondary treatment systems with nutrient removal or other waste water treatment infrastructure approved by the Department of Health and Shire of Murray.

#### 6.6 Bushfire Management Provisions

The Bushfire Management Plan (*Emerge Associates, February 2023*) applicable to the Structure Plan area sets out minimum setback distances between classified vegetation and future habitable buildings to achieve BAL-29.

#### 6.7 Water and Wastewater

Each lot shall be connected to a reticulated water supply.

All dwellings shall be connected to a secondary treatment system with nutrient removal, as approved by the Department of Health Western Australia, and with the base of the system or modified irrigation area being in accordance with the Government Sewerage Policy (2019), as amended. All effluent disposal areas should ensure a 1.5m vertical setback from perched water, winter water tables or flood prone areas are met for a 1:10 year AEP event.

Further geotechnical/groundwater investigations will be required during subdivision stage, and depending on the measured groundwater level, some fill to building pads may be required to achieve the required separation to groundwater levels.



#### 6.8 Fencing

Fencing shall be open post and rail or post and wire construction, and shall be maintained to the satisfaction of the Council.

#### 6.9 Road Network and Access

The internal road network shall be generally in accordance with Plan A – Structure Plan Map.

#### 6.10 Local Water Management and Drainage

Any natural drainage course running through lots shall be covered by an easement for drainage purposes in favour of the Shire of Murray. Any easements shall be identified as such at the time of subdivision.

The subdivider shall construct crossovers to any lots affected by a drainage easement.

#### 6.11 Keeping of Livestock

The keeping or agistment of livestock, shall not be permitted without the written approval of Council. The type and number of any livestock shall comply with the recommendations of the Department of Primary Industries and Regional Development, in accordance with the pasture and soil type. Notwithstanding the above, Council may require the stocking rates to be reduced where they are considered excessive, or the land is subject to significant additional nutrient application or land degradation.

Notwithstanding the preceding provision, the keeping of horses or cattle is prohibited.

## 7.0 Further Subdivision Reporting

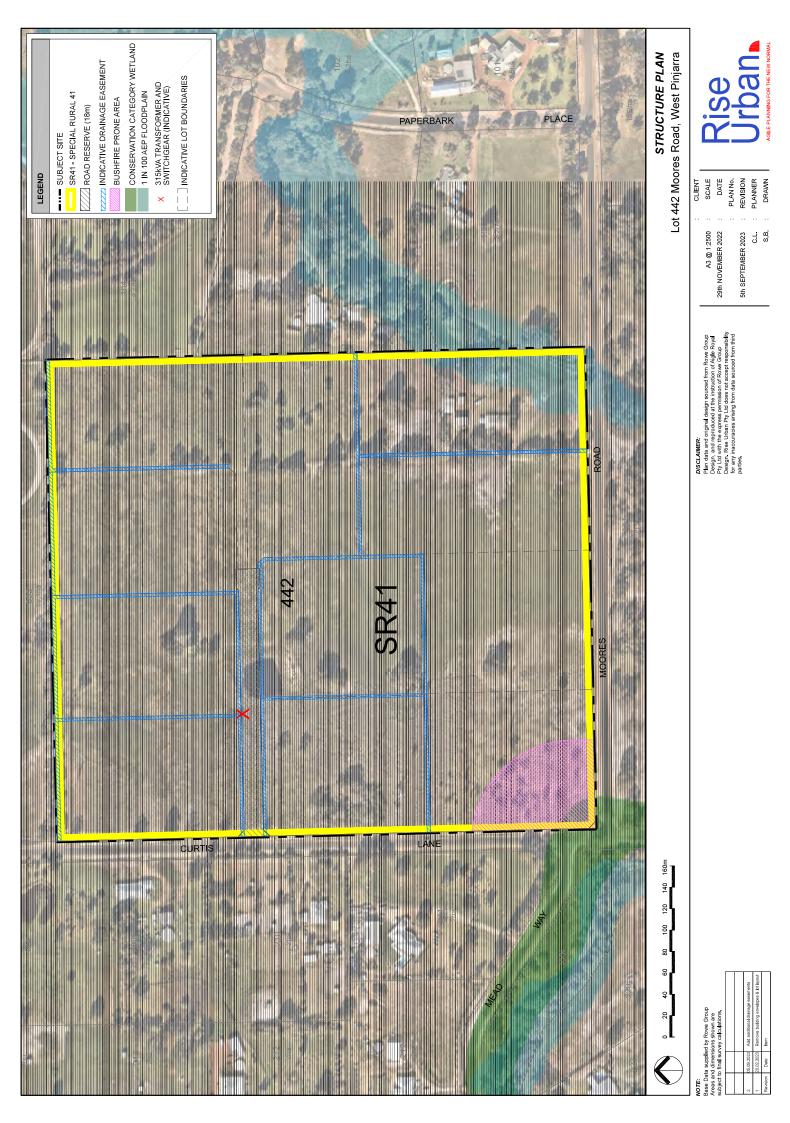
As a condition of subdivision approval, the Shire of Murray may recommend, and the WAPC may impose, a condition requiring implementation of recommendations contained within the following:

- Foreshore Management Plan
- Bushfire Management Plan
- Revegetation Plan and Landscaping Planting Program
- Local Water Management Strategy



PLAN A: STRUCTURE PLAN MAP

Rep02A-1012022 - Structure Plan Part 1 Implementation Report - Lot 442 Moores Road



# Rise Urban

Lot 442 Moores Road, West Pinjarra

Structure Plan





## Lot 442 Moores Road, West Pinjarra

## Structure Plan – Part 2 Explanatory Report



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	Shawmac	Hydrology / Civil Engineering		
	Western Environmental	Foreshore Management Plan		
	LD Total	Landscaping and Revegetation		
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Issue No:	2 – Final including WAPC	2 – Final including WAPC modifications		
Date:	4 September 2023			



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Rise Urban Pty Ltd, 2023.

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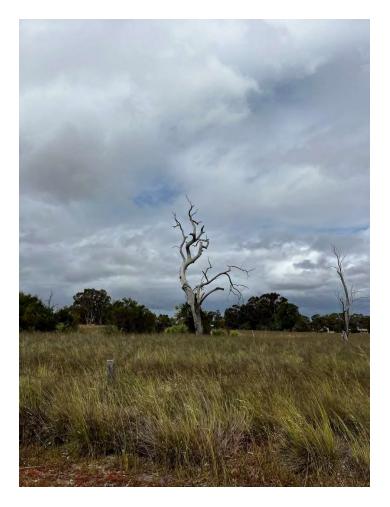
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## **Introduction and Purpose**

This Structure Plan has been prepared in accordance with the obligations set out under Part 4 – Structure Plans of Schedule 2 – Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

The purpose of this Structure Plan is to establish a contemporary planning framework that provides for future subdivision and development of Lot 442 (No.250) Moores Road, West Pinjarra. The Structure Plan establishes the spatial context for future subdivision, and identifies environmental and drainage features of the land that require protection and subsequent notification on titles.

Overall, the Structure Plan aims to enable development of the land into a rural residential subdivision that responds to the surrounding context, while addressing and responding to all site features.

This Structure Plan is informed by a recent amendment (Amendment 312) to the Shire of Murray Local Planning Scheme 4 (LPS4) to rezone Lot 442 Moores Road from Rural to Special Rural. The provisions that were incorporated within Schedule 4 of LPS4 as part of this amendment provide the head of power to enable this Structure Plan to be determined pursuant to clause 15 of Schedule 2 – Deemed Provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

This report is the explanatory report for the Structure Plan, and is to be read in conjunction with the Part 1 Implementation Report, as well as the Structure Plan Map which is contained in the Implementation Report.

Consistent with clause 27 of the Deemed Provisions, this structure plan is a 'due regard' document for the purposes of assessing and determining subsequent subdivision and development applications.

## Part 1 – Site Context

The following sections provide an overview of the physical and legal context of the Structure Plan area.

#### **1.1 Legal Description and Ownership**

The Structure Plan area comprises the entirety of one freehold lot, being 22.6ha. Table 1 below summarises the legal description and ownership of the lot.

#### Table 1 – Lot 442 Moores Road Structure Plan Property Description

Lot Number	Street Address	Street/Locality	Certificate of Title	Land Area (ha)	Owner
442	250	Moores Road, West Pinjarra	27/142A	22.6	Mainmode Pty Ltd

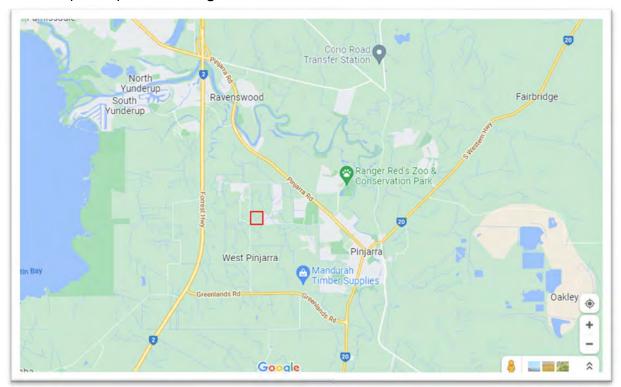
The landowner of the Structure Plan area has provided their consent and support for the progression of planning over their land.



#### 1.2 Location

The Lot 442 Moores Road Structure Plan area is located within the Shire of Murray municipality in the south-west of Western Australia. It can be generally described as land to the north-west of the Pinjarra townsite, and roughly equidistant to the Forrest Highway, Pinjarra Road and Greenlands Road.

The Structure Plan area is located approximately 3.3km north-west of the Pinjarra town centre, and approximately 14.5km south-east of the Mandurah City Centre. It is largely surrounded by land parcels that are being rezoned or have been rezoned to Special Rural.



A location plan is provided at Figure 1.

Figure 1: Location Plan source: Google Maps (2022)

#### 1.3 Site Description and Existing Land Uses

The Structure Plan area comprises approximately 22.6ha of land and is located at the northeastern intersection of Curtis Lane and Moores Road. The following sets out a brief description of the current land use and physical context of the site, while a site plan is provided at **Figure 2**.

The site has been subject to historical clearing, with a small section of forest vegetation in the west, and the remaining land largely comprising grassland. The south-eastern portion of the land contains a dwelling and associated outbuildings, while an existing dam has been constructed in the central area of the site.



Figure 2: Site Plan source: MNG Mapping / Nearmap (2022)

Existing access to the dwelling is provided from Moores Road via an unsealed crossover.

The predominantly cleared and undeveloped nature of the land lends itself to more intensive development, in keeping with adjacent rural residential subdivision and associated land uses.

The Structure Plan area is bordered by Curtis Lane and Moores Road on its western and southern boundaries respectively. Having sealed local roads on two sides is a significant advantage as it provides for a range of access options, ensures the ready delivery of key service infrastructure and assists with access/egress in the event of a bushfire.

Immediately adjacent the subject site, to the east and west, are a number of Special Rural lots, while to the north and south. The rural residential nature of future development within the Structure Plan area is thus consistent with surrounding development.

## Part 2 – Planning Context

The following provides a brief synopsis of those planning instruments and decisions that are directly relevant to the Structure Plan.

#### 2.1 Peel Region Scheme

The Peel Region Scheme (PRS) is the highest order planning scheme that is applicable to the site. The PRS identifies the subject site as 'Rural' zone. The land uses and form of subdivision identified in this structure plan are consistent with the purpose of the Rural zone, which is to:

"...provide for the sustainable use of land for agriculture, assist in the conservation and wise use of natural resources including water, flora, fauna and minerals, provide a distinctive rural landscape setting for the urban areas and <u>accommodate carefully planned rural living</u> <u>developments</u>."

The proposed subdivision and development of the Structure Plan area reflects a *carefully planned rural living development* and therefore aligns with this latter component of the Purpose.

#### 2.2 Shire of Murray Local Planning Scheme 4

The Shire of Murray Local Planning Scheme 4 (LPS4) forms the primary statutory land use control over the Structure Plan area.

Amendment 312 to LPS4 was gazetted in January 2023, and had the effect of rezoning the Structure Plan area from 'Rural' to 'Special Rural (SR41)' as well as setting out the conditions for development in Schedule 4 of the Scheme. This rezoning brought the subject site into alignment with the surrounding special rural and rural residential areas that characterise this portion of West Pinjarra.

A map depicting the current LPS4 zoning (as amended) is shown at **Figure 3** (overleaf), while Table 2 sets out the provisions contained in Schedule 4 (SR41) of the Scheme, and describes how this Structure Plan responds to each provision.

As demonstrated in Table 2, this Structure Plan responds directly to the various development requirements set out in Schedule 4 of LPS4, and ensures a planning framework that directly aligns with the purpose and intent of Amendment 312 and the Shire's broader strategic planning.

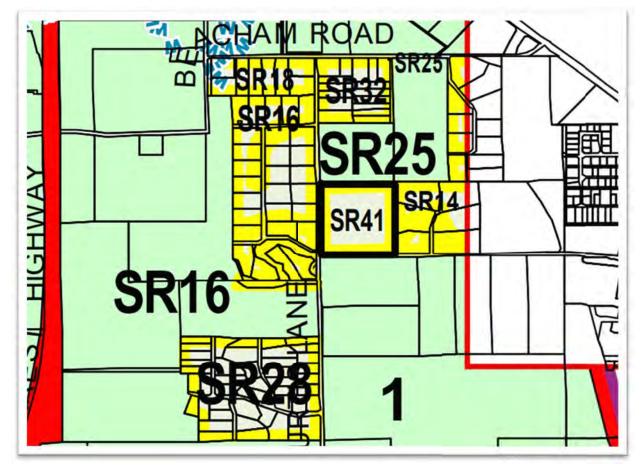


Figure 3: Zoning Map source: Shire of Murray Local Planning Scheme 4

#### Table 2 – Local Planning Scheme 4 – Schedule 4 – SR41 Provisions

Special Provisions	Structure Plan Response
Subdivision and development of the land should be generally in accordance with a Local Structure Plan approved by the Western Australian Planning Commission.	This structure plan, once approved, provides the head of power for subsequent subdivision and development.
Each lot shall not be less than two hectares in area	Refer structure plan Part 1 – section 6.2
Prior to the subdivision of the land, a detailed plan shall be prepared indicating the dimensions and suitable position of a building envelope for each proposed lot. Each building envelope shall have a maximum area of 2000m <sup>2</sup> .	Indicative building envelopes are depicted on the structure plan map and will be confirmed as a condition of subdivision approval – refer structure plan Part 1 -section 6.4
Each lot shall be connected to a reticulated water supply	Reticulated water is accessible via Curtis Lane. Refer structure plan Part 1 – section 6.2 for requirement to connect to reticulated water supply.
No dwelling shall be approved by Council unless it is connected to an alternative	Refer structure plan Part 1 – section 6.6 and Site and Soil Evaluation prepared by Galt

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## Rise Urban

domestic waste water treatment system with an adequate phosphorous retention capacity, as approved by the Department of Health Western Australia, and with the base of the system or modified irrigation area being in accordance with the Government Sewerage Policy (2019), as amended. A 1.5m separation from maximum groundwater to ground level is required for the system.	Geotechnics at Appendix A of the LWMS at Appendix 2 of this Structure Plan.
A site and soil evaluation, prepared in accordance with the Government Sewerage Policy (2019), shall be submitted and approved as part of the local structure planning process.	Refer Site and Soil Evaluation prepared by Galt Geotechnics at Appendix A of the LWMS at Appendix 2 of this Structure Plan.
Fencing shall be open post and rail or post and wire construction, and shall be maintained to the satisfaction of the Council.	Refer structure plan Part 1 – section 6.7
A Revegetation Plan and Landscaping Planting Program, as part of a comprehensive Landscape and Environmental Management Plan, shall be prepared prior to the preparation of a Local Structure Plan. The Revegetation Plan shall be prepared by a suitably qualified consultant, and implemented by the subdivider to the satisfaction of the Shire of Murray.	Refer Appendix 4 – Landscaping and Revegetation Plan.
A Local Water Management Strategy shall be prepared to the requirements of the Department of Water and Environmental Regulation and the Shire of Murray, shall be submitted prior to the preparation of a Local Structure Plan.	Refer Appendix 2 – Local Water Management Strategy and Structure Plan Part 1 - section 6.9.
Any natural drainage course running through lots shall be covered by an easement for drainage purposes in favour of the Shire of Murray.	Easements to be identified at subdivision stage. Refer Structure Plan Part 1 - section 6.9. Indicative alignments are depicted on the Structure Plan map and are subject to confirmation at subdivision stage.
The subdivider shall fill all building envelopes to achieve a minimum 1 metre above existing surface level or 0.5 metres above the forecast 100 year flood level whichever is the greater.	Refer Structure Plan Part 1 - section 6.4.
The subdivider shall construct crossovers to any lots affected by a drainage easement.	Condition of subdivision approval
A Foreshore Management Plan shall be prepared and implemented by the subdividing land owner for Buchanan Drain, to the satisfaction of the Shire of Murray and the Department of Water and Environmental Regulation.	Refer Appendix A – Foreshore Management Plan
In order to conserve the landscape, trees and other indigenous vegetation shall not be felled or cleared without the prior written approval of the Council, except where required for the	Refer Structure Plan Part 1 - section 6.3.



erection of a single house, outbuildings, effluent disposal system, access ways, fences, firebreaks and other fire management requirements in accordance with an approved Bushfire Management Plan.

The keeping or agistment of livestock, shall not be permitted without the written approval of Council. The type and number of any livestock shall comply with the recommendations of the Department of Primary Industries and Regional Development, in accordance with the pasture and soil type. Notwithstanding the above, Council may require the stocking rates to be reduced where they are considered excessive or the land is subject to significant additional nutrient application or land degradation.	Refer Structure Plan Part 1 - section 6.10.
Notwithstanding the preceding provision, the	Refer Structure Plan Part 1 - section 6.10.

keeping of horses or cattle is prohibited.

## 2.3 Shire of Murray Local Rural Strategy

Addendum No.2 to the Shire's Local Rural Strategy – Curtis Road Special Rural Zone - was adopted via a resolution of Council in September 1996. The Strategy is a key strategic land use planning document for the Shire and consists of a number of planning objectives and associated development guidelines for each of 22 precincts into which the Shire has been divided for the purposes of the Strategy. The Structure Plan area is located within Planning Precinct No.19 Beacham – Curtis.

Addendum No.2 of the Strategy relates directly to Planning Precinct No.19 and sought to:

- Provide for special rural zones which take into account land capability constraints; and •
- Provide for farmlet subdivision to cater for equestrian activities which require relatively • close proximity to facilities in Pinjarra.

In this regard, development guidelines applicable to the Precinct and in the context of the site would support special rural subdivision subject to proponents satisfying a number of site-specific criteria. These include, among other provisions:

- Being located within approximately 3km of existing urban or townsite areas; •
- Outside scheme water areas; •
- Outside floodways:
- Not adjacent to highways or main tourist roads, unless screened and with no direct access:
- Conventional or alternative on-site effluent disposal systems to be used.

It was on the basis of meeting the above and other land use-related criteria in the context of Addendum No.2 that the Scheme Amendment to rezone the land from 'Rural' to 'Special Rural' was instituted, and upon which this subsequent Structure Plan has been prepared. The specific considerations relating to water management and effluent disposal systems are addressed in subsequent sections and appendices of this report.

#### 2.4 Shire of Murray Local Biodiversity Strategy (Shire of Murray, 2013)

The aim of the Shire of Murray Local Biodiversity Strategy (LBS) is to *protect bushland, wetlands and rivers so that biodiversity is conserved and can continue to provide a multitude of benefits.* 

The LBS recognised that the Shire was entering a period of significant growth, which subsequently places considerable stress on the natural environment. In this regard, the LBS incorporates a number of 'on-ground conservation objectives' applicable in the context of biodiversity protection and enhancement of local natural areas (LNA). Objective 3 seeks to *maximise retention of all other LNA on zoned lands (rural and rural residential lands)*. The relevance of this to the subject land will be discussed further below.

The Structure Plan area comprises a small portion of land in the south-western corner, commensurate with the area of Conservation Category Wetland (CCW) noted in Part 1 of this Structure Plan, that is also identified within Figure 8 of the LBS as an LNA. This small portion of land is part of Precinct No.30 (Nirimba/West Pinjarra). In addition, the LBS also identifies a watercourse traversing the site, as referred to in Part 1 of this Structure Plan.

In order to account for these environmental features in the context of the Structure Plan, the following is proposed:

- 1. The small portion of CCW will be identified as such on the Structure Plan, with an associated notification on title; and
- 2. Drainage easements will be identified as such on the Structure Plan.

In addition, the intent of the LBS to enhance LNAs will be augmented by the implementation of provisions relating to the 'Special Rural' zone within the Shire's Local Planning Policy – Vegetation Management. In this regard, revegetation and planting will occur during the subdivision and development process. This aligns with advice received from the EPA in the context of the rezoning of the land from 'Rural' to 'Special Rural', whereby revegetation and landscaping planting to reduce any potential impacts from land use intensification would prove beneficial.

Appendix 4 contains the Landscaping and Revegetation Plan for the LNA in accordance with the requirements of Schedule 4 of the Scheme.

#### 2.5 Shire of Murray Local Planning Policies

There are two Local Planning Policies which will apply in the context of subdivision and development of the land, including:

- 1. Vegetation Management
- 2. Water Sensitive Urban Design

The applicable provisions of these policies are summarised in Table 3 below.



Policy	Applicable Policy Provisions	Structure Plan response
Vegetation Management	<ul> <li>'Special Rural' Zone (New Lots from 2HA to 4Ha)</li> <li>In recognition of the nutrient reduction potential of Alternative Systems for Domestic Wastewater Disposal, different revegetation standards apply:</li> <li>Design of subdivision to minimise impact on existing vegetation Proposals for land devoid of significant remnant vegetation to be accompanied by a Landscaping Planting Program Building envelopes should not be cleared at the time of subdivision</li> </ul>	The Structure Plan has been prepared to retain existing mature trees along proposed fence lines or located wholly within individual lots. The indicative location of building envelopes, as per the Subdivision Plan, takes into account existing cleared areas as well as drainage and potential bushfire hazards. This Structure Plan is supported by a detailed Landscaping and Revegetation Plan (refer Appendix 4) which addresses the requirement for minimum vegetation replanting.
Water Sensitive Urban Design	Preparation of Water Management Strategies Soil Amendment Local Deep-Rooted Perennial Vegetation	The Structure Plan is supported by the following documents: Local Water Management Strategy Site and Soil Evaluation Revegetation Plan These documents sufficiently address the applicable elements of WSUD, and will be implemented at subdivision / development stage.

#### 2.6 State Planning Policy 2.1 Peel-Harvey coastal plain catchment

State Planning Policy No. 2.1 – The Peel-Harvey Coastal Plain Catchment ('SPP 2.1') outlines provisions to minimise environmental damage to the Peel-Harvey Estuarine System from changes in land use.

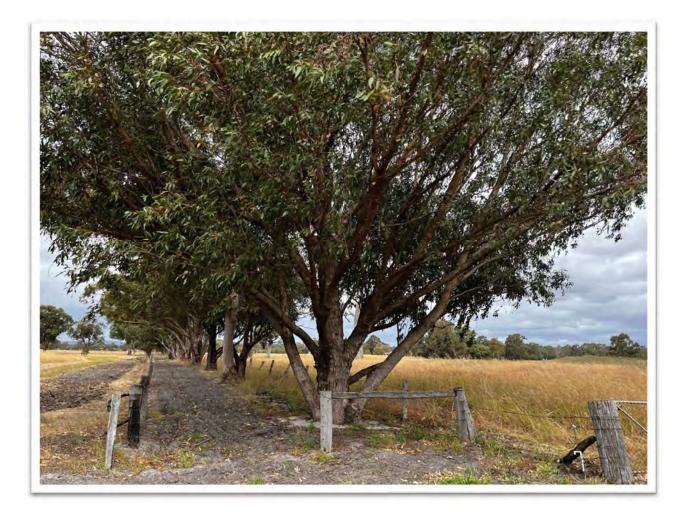
The principles and objectives were all addressed and resolved as part of Scheme Amendment 312 which rezoned the structure plan area to Special Rural, and inserted specific environmental protection requirements into Schedule 4 of the Scheme.

#### 2.7 State Planning Policy 3.7 – Planning in Bushfire Prone Areas (WAPC, 2015)

State Planning Policy 3.7 – Planning in Bushfire Prone Areas ("SPP 3.7") sets out the framework for land use planning to address bushfire risk management in Western Australia.

A portion of the Structure Plan area, along with a broader area to the south west (generally aligning with the mapped wetland area) is designated as bushfire prone areas in accordance with SPP 3.7, and as such, further assessment against the requirements of SPP 3.7 is required.

A Bushfire Hazard Level Assessment and Bushfire Management Plan has been prepared and is discussed further in sections 3.5 and 4.6 of this report. The BAL Assessment confirms that bushfire risk is not a constraint to development, and can be safely mitigated through adequate separation from the hazards. In this regard, the indicative Concept Plan in Part 4 of this report provides indicative building envelopes within each lot, providing the most practicable way in which the hazard separation can be achieved.



## Part 3 – Site Conditions, Opportunities and Constraints

The following section sets out the physical features of the site that inform the design of the Structure Plan. This assessment is supported by technical analysis and reporting which occurred during the Scheme Amendment stage, and which are appended to the Structure Plan as described below:

Appendix 1 – Foreshore Management Plan – Western Environmental Appendix 2 – Local Water Management Strategy - Shawmac Appendix 3 - Bushfire Management Plan - Emerge Associates Appendix 4 – Landscaping and Revegetation Plan – LDTotal Appendix 5 - Servicing – Shawmac

As demonstrated below, there are some environmental and physical attributes which warrant site-specific planning responses. These are not constraints to development, but rather opportunities to deliver a well-considered Plan that is site responsive, and respectful of the natural and physical setting in which it is located.

Further analysis of the physical and environmental context of the site is set out in the following sections.

#### 3.1 Vegetation, Flora and Fauna

The subject land has been historically cleared of vegetation, in the context of its rural land use over time. There are some scattered trees along the northern boundary, through the centre of the site, and within close proximity to the existing single dwelling in the south-eastern corner. There are opportunities for the retention of these trees within the future rural residential lots.

As discussed in section 2.4 above, the south-western corner of the Structure Plan area is associated with a CCW. The majority of the CCW is located outside of the property boundary and on the opposite side of the intersection of Curtis Lane and Moores Road.

In relation to vegetation and flora for the site more broadly:

- No Bush Forever sites are located within or adjacent to the Structure Plan area.
- There are unlikely to be any threatened or priority flora, or threatened or priority ecological communities on the site based on the limited vegetation and the disturbed nature of the site.
- Scattered remnant paddock trees, with some *Melaleuca* spp. *and Corymbia calophylla* are located in the south-west of the Structure Plan.
- The site comprises largely grassland.

There are opportunities to retain existing trees and undertake revegetation on-site given both the low-intensity scale of subdivision, with a minimum 2ha lot size, and the positioning of building envelopes in suitable, cleared areas. In this regard, the Shire of Murray has indicated that each lot is required to be revegetated to an equivalent 15% of its total area in deep-rooted native vegetation, as part of the requisite 'Revegetation Plan and Landscaping Planting Program'.



#### 3.2 Landform and Landscape

The Structure Plan area is relatively flat and level, with the majority of the site sitting at or around 6m AHD. The site does fall away slightly to the north-west, and a lower-lying rural drain traverses the south eastern corner of the site.

The current landscape qualities of the site are predominantly rural in nature, with cleared pasture areas and some scattered trees and vegetation. There are no ridgelines, elevated positions or mapped views of significance within the Structure Plan area or nearby which warrant a specific landscape response.

There are opportunities for the Structure Plan design to respect and respond to the existing rural character of the landscape through retention of any mature trees, siting of building envelopes well back from boundaries to maintain privacy, and revegetation.

#### **3.3 Floodways and Wetlands**

A small portion of the south-east of the Structure Plan, within proposed Lot 7 is identified as being subject to a 1 in 100 AEP floodplain.

The presence of a floodplain within and adjacent to the Structure Plan area is not a constraint to the development of the remainder of the Structure Plan area. The floodplain can be accommodated and integrated within proposed Lot 7, with little or no bearing on the use or enjoyment of this lot.

As noted earlier in this report, there is a small section of CCW identified within the south-western corner of the site. While this has been accounted for on the Structure Plan, it is also acknowledged that existing roads effectively sever this in the context of the Structure Plan area from the evident wetland area located to the south-west of the Curtis Lane/Moores Road intersection.

#### 3.4 Surface and Groundwater

Consistent with the overall topography, and notwithstanding the small portion of floodplain (comprising 5-6m AHD) within the south-east corner of the site, surface water and stormwater runoff typically drains in a north-westerly direction towards the outlet channel at the north-western boundary of the Structure Plan area.

Sandy soils exist across the site to depths of approximately 0.1m to 0.2m, while sandy clay soil extends generally to a depth of 4.5m.

The Site and Soil Assessment notes that the maximum winter groundwater level is expected to be at around the ground surface to about 0.7 m below the pre-development ground surface, with the site being mapped as a sewage sensitive area (SSA) in accordance with the Government Sewage Policy (GSP, 2019). In this regard, the Land Application Area for each lot, in the context of effluent disposal systems, will need to achieve a minimum separation of 1.5 m from the base of any disposal area to the maximum groundwater elevation, which will result in minimum filling of around 1.1 m to 1.8 m from pre-development ground levels in the footprint of the houses and effluent disposal areas.



### 3.5 Bushfire

The south-western corner of the Structure Plan area is designated as 'bushfire prone' by the Office of Bushfire Risk Management (OBRM) mapping, however the Bushfire Management Plan undertaken for the site confirms that bushfire is not a constraint to development. In this regard, bushfire risks can suitably be managed through the imposition of appropriate where necessary, in particular via the provision of required building envelopes in appropriate, site-responsive locations.

A map depicting BAL contours is depicted at **Figure 4**. The outcomes of the BMP are discussed further in Section 4.6.

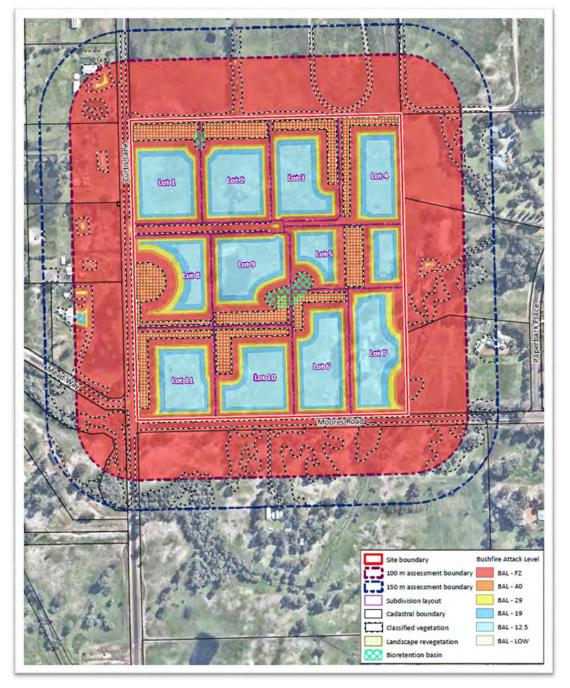


Figure 4: BAL Contour Plan source: Emerge Associates, 2023



#### 3.6 Aboriginal and European Heritage

The Structure Plan area does not contain any registered Aboriginal heritage sites or places, as per the Department of Planning, Lands and Heritage *Aboriginal Heritage Inquiry System*.

Further, the State Register of Heritage Places – *inherit* – does not identify any other places or sites or heritage significance.

#### 3.7 Local Road Network – Access and Capacity

The Structure Plan area abuts Curtis Lane and Moores Road to the west and south respectively. Both of these roads are classified as access roads under the care and control of the Shire of Murray, ensuring direct and efficient access from the structure plan area to the external road network.

Whilst direct lot access to both Moores Road and Curtis Lane is permitted, there is an opportunity to minimise the number of crossovers to these existing roads through the construction of a new internal road within the structure plan area, connecting eastward from Curtis Lane.

#### 3.8 Servicing

A Servicing Report was undertaken in support of the Scheme Amendment report to rezone the land, in the context of the availability of existing services in the locality, and their capacity to service the Structure Plan area when developed.

The Servicing Report's findings confirm the following:

- The land is not connected to reticulated sewer. As such, and in the context of groundwater levels, effluent from each lot created must be treated via an alternative domestic wastewater treatment system, with a minimum vertical separation distance to groundwater of 1.5 metres. Such treatment systems must be approved in the first instance by the Health Department of Western Australia prior to any subdivision of lots.
- The land is currently serviced by an HV power cable from Curtis Road. While the existing
  network has the capacity to service the proposed lots, the existing HV cables would
  require connection to a 315kVA transformer and switchgear, located along the western
  boundary of the site.
- The land can access existing reticulated water infrastructure which extends along Curtis Lane and comprises a main along Moores Road, with Water Corporation advice indicating the proposed lots can be accommodated within the existing network.
- The land is currently serviced by NBN access, with Telstra servicing the broader area. Prior to subdivision of the lots, NBN will need to confirm whether any additional infrastructure assets are required.
- The land is not connected to a reticulated gas supply.



#### 3.9 Earthworks

Galt's geotechnical analysis (included as an appendix to the LWMS) demonstrates that the Structure Plan area will be required to achieve finished ground levels (FGL) of at least 7.9m AHD for lots within the west of the site (Lots 1, 2, 8, 9, 10 and 11) and 8.3m AHD within the east of the site (Lots 3, 4, 5, 6 and 7) to enable domestic wastewater treatment systems to be located satisfactorily within each lot. In order to achieve the minimum vertical separation distance to maintain adequate clearance to ground water, imported fill of a suitable nature will be required for the designated building envelopes. The Local Water Management Strategy includes some preliminary lot level information and notes that, given the small nature of the subject land, while it is not considered that a UWMP is an essential requirement at subdivision stage, further particulars will be needed at detailed design stage, including the following:

- Completion of additional feature survey if required;
- Confirmation of outfall arrangement to Lot 603;
- Preparation of earthworks and road designs, including swales and outfall;
- Landscaping selection and treatment;
- Revising the drainage design model to incorporate the earthworks and road designs and improving level of detail, particularly around the outfall arrangement and culvert design;
- Preparation of detailed design plans and calculations for Shire review and acceptance.



## Part 4 – Lot 442 Moores Road Structure Plan

The Structure Plan takes into consideration all of the site characteristics, local context, policy context, and the physical opportunities and constraints identified in the previous sections of this report, and demonstrates an indicative rural residential form that is efficient, robust, and responds to the local character.

The Structure Plan map is included as Figure 5, while an indicative Subdivision Concept is Figure 6. The Subdivision Concept plan demonstrates one possible manner in which the site could be developed consistent with the Structure Plan map and implementation provisions and identifies and indicative lot layout, the location of which will be confirmed at subdivision stage.

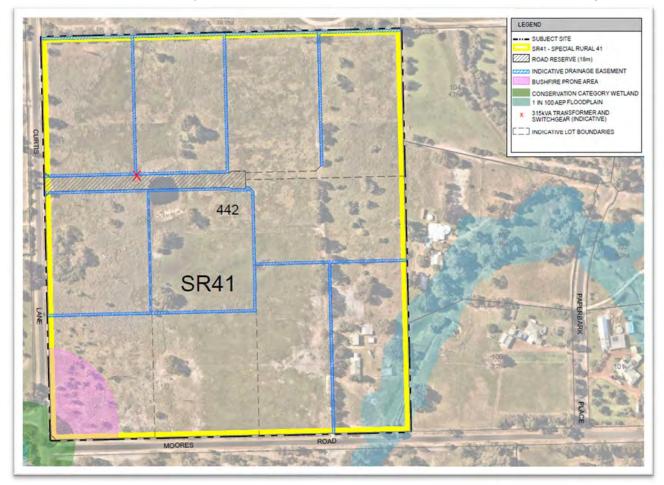


Figure 5: Lot 442 Moores Road Structure Plan source: Rise Urban, 2023

#### 4.1 Structure Plan Guiding Principles

Development of the Structure Plan and Concept Plan is based on the following key principles:

- Ensure a minimum 2ha lot size in accordance with Scheme provisions.
- Recognise and retain the small portion of CCW within one lot, and the requirement for notification on title of this environmental feature.
- Recognise and retain existing mature trees within lot boundaries wherever practicable.
- Incorporate drainage easements which align with the natural water course traversing the site.
- Minimise access points to the external road network to minimise disruption and retain the rural and rural residential integrity of the broader Structure Plan area.

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- Recognise and retain the portion of 1 in 100 AEP floodplain via incorporation into the Structure Plan and the requirement for notification on titles.
- Locate building envelopes within cleared areas and away from bushfire hazards.

The following subsections summarise the key attributes of the Structure Plan and how it responds to the site and policy context.

#### 4.2 Indicative Subdivision Layout

Based on the principles described in the previous section, the Structure Plan adopts a traditional rural residential form commensurate with surrounding development that allows for appropriate access to and egress from proposed lots, while maintaining the rural feel of the locality. The intended pattern of subdivision, utilising a cul-de-sac from Curtis Lane, minimises visible cues to the rural residential intention of the development and allows for efficient distribution of vehicle traffic.

In this instance the proposed lot layout has been adapted to recognise the key physical attributes of the site including the small portion of CCW and bushfire prone land to the south-west, and the natural floodplain area to the south-east. In this regard, it is proposed to retain and enhance these features, wherever possible, within the context of two individual lots.

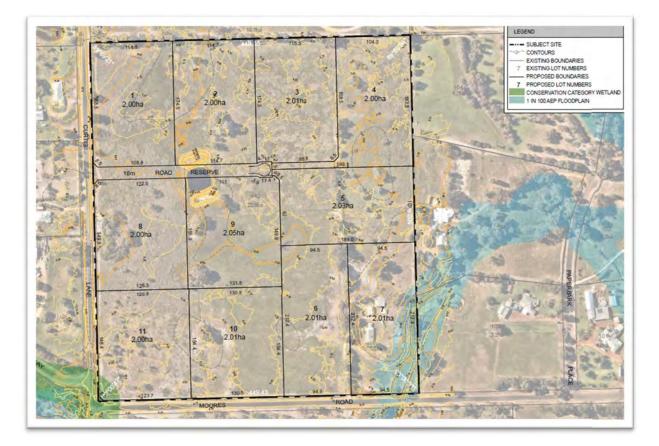


Figure 6: Lot 442 Moores Road Subdivision Concept Plan source: Rise Urban, 2023

#### 4.3 Land Use

Given the 'contained' nature of the Structure Plan Area, and the fact that it is located within a broader rural/rural-residential area, opportunities for land uses within the Structure Plan area are limited. In this regard, the most suitable land use for this area is rural-residential development in Rep03A-1012022 – Structure Plan Part 2 Report – Lot 442 Moores Road, Pinjarra



order to meet the demand for such housing within the Shire, but also to retain the rural character of the locality.

The Structure Plan reflects the Special Rural zoning, with the intent being for rural residential lots and, in turn through the provisions of LPS4, the potential for rural pursuits and small-scale home-based enterprises and the like.

#### 4.4 Site Density and Indicative Lot Layout

The Structure Plan has been informed by, and the Concept Plan meets the requirements of, the provisions of LPS4 in the context of the recent Scheme Amendment to rezone the land. In this regard, lots are to comprise a minimum of 2ha, with subsequent building envelopes applicable to each lot to be a maximum of 2,000m<sup>2</sup>.

Indicative lots are shown on the Concept Plan. The location of these have taken account of:

- The minimum lot size as per LPS4
- Existing vegetation
- Existing environmental features such as the CCW, bushfire prone land and floodplain

#### 4.5 Drainage and Water Management

Shawmac has prepared a local water management strategy (LWMS) which meets the requirements of Better Urban Water Management (WAPC 2008) and demonstrates how both ground and surface water can be managed as part of the development of the Structure Plan area.

The LWMS is based on the following key water management principles:

- The development will be serviced with scheme water, but this may be supplemented by:
   Rainwater tanks to collect roof water.
  - Garden bores.
  - Domestic greywater.
- There is no deep sewerage connection available, but an SSE completed by Galt Geotechnics confirms that on site effluent disposal through the use of secondary treatment systems would be possible.
- Stormwater management within individual lots should aim to replicate the existing conditions by providing greater than usual infiltration capacity through the installation of soakwells and swales within lots, to replicate the existing infiltration and depression storage characteristics of the site.
- An open drain network, sized for the 20% AEP event is proposed to be installed generally along lot boundaries with the objective of preventing stormwater flow from one lot to another and maintaining the existing flow path through the site to Lot 603. Significant attention is required to the outfall towards lot 603 to minimize risk of scour or nuisance to that property. At this stage a level spread is proposed which will promote shallow, slow moving sheet flow.
- Building pad levels are to be set clear of 1% AEP flood levels, but it should be noted that groundwater clearance will likely govern the final levels.
- All effluent disposal areas ensuring a minimum 1.5m vertical setback from perched water, winter water tables or flood prone areas are met for a 1:10 year AEP event.
- All building pad levels will need to be confirmed at later stage by individual landowners, dependent on groundwater level and location/layout of the building and effluent disposal system.



The LWMS also recognises that some further work may be required as part of the detailed subdivision design stage, including:

- Potential minor additional survey to inform detailed designs.
- Confirmation of outfall arrangement to Lot 603.
- Preparation of earthworks and road designs, including swales and outfall.
- Landscaping selection and treatment.
- Revising the drainage design model to incorporate the earthworks and road designs and improving level of detail, particularly around the outfall arrangement and culvert design.
- Preparation of detailed design plans and calculations for Shire review and acceptance.

The LWMS has been provided to the Shire ahead of this Structure Plan, and it is understood that the Shire is supportive of the principles established in the LWMS.

#### 4.6 Revegetation

As per the requirements of Schedule 4 of LPS4, the Structure Plan is informed by a revegetation plan prepared by landscape and rehabilitation experts LD Total – refer Appendix 4.

The Revegetation Plan provides for revegetation of a minimum of 15% (3,000m<sup>2</sup>) of each of the proposed lots. The revegetation includes deep-rooted native vegetation, and strikes an appropriate balance between revegetation of the land and bushfire risk mitigation for the future residents.

#### 4.7 Foreshore Management Plan

In accordance with the requirements of Schedule 4, the Structure Plan is supported by a foreshore management plan which sets out management measures and mitigation strategies to be implemented during the construction and further management of the part of the Buchanan Drain foreshore that traverses the south eastern corner of the Structure Plan area.

The aim of the strategy is to create a self-contained foreshore ecosystem which will not require further management apart from maintenance measures.

A full copy of the Foreshore Management Plan and its recommendations, prepared by Western Environmental, is at Appendix 1 to the Structure Plan.

#### 4.8 Bushfire Mitigation

A small portion of the Structure Plan area – to the south-west - is identified as bushfire prone by the State bushfire mapping. The site-specific Bushfire Management Plan (BMP) prepared by Emerge Associates and included as Appendix 3 confirms that the post-development bushfire hazards are limited to:

- Forest (Class A) vegetation, associated with existing remnant vegetation within a small pocket to the west of the Structure Plan area, and to the east, external to the Structure Plan area.
- Woodland (Class B) vegetation, situated to the south and external to the site.
- Scrub (Class D) associated with areas of proposed revegetation within the site to address the Shire of Murray Local Planning Policy Vegetation Management 2018. This is associated with supporting planting up to a minimum 15% of the lot. Up to two-thirds of the planting is required to be shrub planting.
- Grassland (Class G) vegetation, associated with existing paddock areas across the site.



The Structure Plan responds to these hazards by including a 18m road reserve which, when coupled with the prescribed 2ha minimum lot size and the identification of suitable building envelopes, appropriately achieves bushfire and other environmental requirements.

The BMP confirms that a BAL rating of BAL-29 or lower can be achieved through the appropriate siting of building envelopes and Asset Protection Zones, and identifies the developable area of each individual lot, with the final BAL ratings and building envelopes to be determined at later stages in the planning process. Figure 7 depicts a spatial representation of the bushfire management strategies for the site.

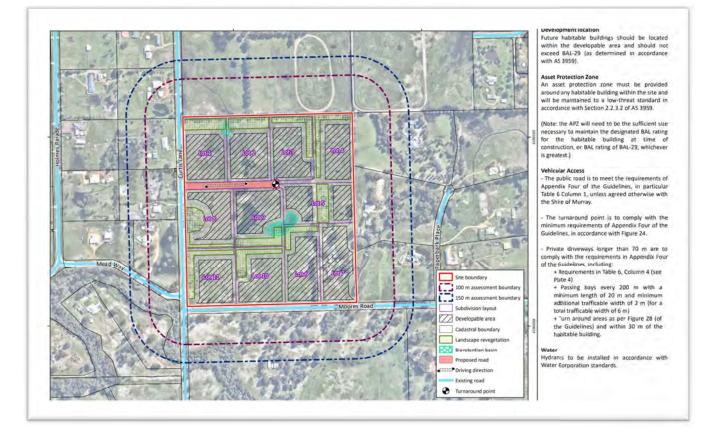


Figure 7: Spatial Representation of Bushfire Management Strategies source: Emerge Associates, 2023

#### 4.9 Local Road Network

The Structure Plan makes provision for a contextually appropriate local road network, incorporating an indicative 18m wide cul-de-sac, approximately 240m long. This access point to the local road network runs eastwards from Curtis Lane. Five indicative lots -2, 3, 4, 5 and 9 - are accessible via this cul-de-sac, while Lots 1, 6, 7, 8, 10 and 11 are able to be accessed via the existing local road network, incorporating Curtis Lane and Moores Road.

It is important to note that this is subject to further refinement at subdivision stage, and the network depicted in the Structure Plan is not intended to be binding on the future subdivider.

The Shire of Murray has advised that the exact location of vehicular crossovers to Curtis Lane and Moores Road can be further evaluated through the civil design process at subdivision stage.

#### 4.10 Development Staging



Given the relatively small and self-contained nature of the site, it is envisaged that all subdivision works will likely be completed within a single construction stage. It is understood that subdivision works will commence as soon as appropriate approvals are in place – anticipated to be in Q4 of 2023.

