Henry Street Structure Plan

JULY 2018

(SPN/2030)

prepared for the Shire of Katanning

landinsights
PLANNING DESIGN ENVIRONMENT

Henry Street Precinct Structure Plan (SPN/2030)

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Document History

Date	Document Name	Document Manager	Summary of Document Revision	Client Delivered
Oct-15	969-03 Draft D-Oct15-MT	MT	Draft Structure Plan for internal review and finalisation.	Nov 15
Feb-16	969-03 Draft E-Jan16-MT	MT	Draft Structure Plan revised in accordance with Structure Plan Framework (August 2015) Additional information inserted relating to draft Local Planning Scheme Provisions WAMMCO Lot Removed Structure Plan Area renamed Other updates as required.	Feb 16
Apr-16	969-04 Draft F-Apr166-MT	MT	DRAFT FOR ADVERTISING	Apr 16
Apr-18	969-04 Draft G-Apr16-MT	JE	Final Draft – WAPC Schedule of Modifications	
July 18	July 18	MT/SoK/DPLH	Final	

Technical input provided by:

1. Shawmac Consulting Engineers
2. Bushfire Prone Planning
3. Talis Consultants
4. Galt Geotechnics
5. Terratree

This Structure Plan is prepared under the provisions of the Shire of Katanning Local Planning Scheme No. 5.

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

6 August 2018

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

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

WITNESS

6 August 2018 — DATE

6 August 2028 — DATE OF EXPIRY

Table of Amendments

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

Pre-lodgement Consultation

The following were consulted as the Structure Plan was being prepared.

Agency or Organisation	Date of Consultation	Method of Consultation
Shire of Katanning	July 2014, May 2015, November 2015, February/March 2016	Meeting, Phone, Email
Department of Planning	October 2014	Meeting
Great Southern Development Commission	July 2014, May 2015	Meeting
Department of Environment Regulation	September 2014	Letter
WAMMCO	September 2014	Meeting
Western Power		Letter
Water Corporation		Letter
Department of Water		Letter

Executive summary

WAMMCO are Western Australia's largest lamb processor and operate the abattoir in Katanning, north- west of the town site. The Henry Street Precinct Structure Plan area has been identified to provide limited industrial expansion to facilitate complementary land uses to the WAMMCO abattoir operation, without compromising public health. The Structure Plan aims to protect surface and groundwater resources by only allowing for subdivision and development that suitably manages flood risk, has appropriate effluent disposal services and does not present a risk to public health.

The Henry Street Precinct Structure Plan has been identified as a Development Investigation Area 9 (DIA9) in the Local Planning Strategy with the following purpose:

> *'To provide limited industrial expansion to facilitate complementary land use to WAMMCO.'*

The Henry Street Precinct Structure Plan area is located north-west of the Katanning townsite. It is bounded by Forrest Hill Road to the east, Henry Street and Crosby Street to the south, Great Southern Highway and Trimmer Road to the west and Water Corporation landholdings to the north.

Land Description

Lot	Lot Area	Title Details	Street address	Landowner
2809	77ha	DP117098	Great Southern Highway	Shire of Katanning
6	5ha	D60642	Forrest Hill Road	Shire of Katanning
5	3ha	D60642	Henry Street	Shire of Katanning
4	19ha	D60155	Great Southern Highway	Shire of Katanning
1	11.8ha	D3246	Great Southern Highway	Shire of Katanning

Key elements of the Structure Plan

The Structure Plan provides for the ongoing use of the WAMMCO site and facilitates appropriate and complementary industrial uses. It is anticipated that development of the Structure Plan area will occur over time. This Structure Plan is the first prepared for the site and does not supersede any earlier planning work.

A summary of the Structure Plan is provided in the following table.

Item	Data	Structure Plan Ref.
Total area covered by the Structure Plan	117.75ha	1.1
Industrial Lots	113.83ha	1.4, 2.1, 2.3, 4.1, 4.2
Highway Vegetation Strip	2.48ha	1.6, 3.1, 4.1
Indicative Lot Yield – Industrial	15 lots	4.1, 4.6
Development Exclusion Area (Creekline)		1.4, 3.3, 4.2

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Technical Appendices Index

Appendix no.	Document title
1	Structure Planning: Environmental Investigations - Project TE14012, Talis November 2014;
2	Katanning WAMMCO Site Local Water Management Strategy – Version C, Job 1409018, Shawmac Pty Ltd 9 August 2017;
3	Bushfire Hazard Assessment – Project No. 14129, Bushfire Prone Planning July 2014;
4	Servicing and Infrastructure – Doc #: LI-KT-01, Shawmac Pty Ltd September 2014.

Abbreviations

Asbestos Containing Material……	ACM
Australian Height Datum…….	AHD
Average Recurrence Interval…….	ARI
Below Ground Level……	bgl
Bushfire Attack Level……..	BAL
Department of Aboriginal Affairs……..	DAA
Department of Agriculture and Food……	DAFWA
Department of Environment Regulation……..	DER
Department of Parks and Wildlife…….	DPAW
Department of Planning…….	DoP
Department of the Environment……	DotE
Department of Water…….	DoW
Development Investigation Area…….	DIA
Environmental Protection Authority…….……	EPA
Environmental Protection and Biodiversity Conservation……	EPBC
Megavolt Amperes…….	MVA
State Planning Policy……	SPP
Water Information Network……	WIN
Western Australian Planning Commission…….	WAPC

PART ONE
Implementation

1 Implementation

1.1 Structure plan area

This Structure Plan applies to Lot 2809 Baker Road, Lots 1 and 4 Great Southern Highway, Lot 5 Henry Street and Lot 6 Forrest Hill Road, Katanning as shown in Figure 2.1.

Table 1.1 – Legal Description and Ownership

Lot	Lot Area	Title Details	Street address	Landowner
2809	77ha	DP117098	Great Southern Highway	Shire of Katanning
6	5ha	D60642	Forrest Hill Road	Shire of Katanning
5	3ha	D60642	Henry Street	Shire of Katanning
4	19ha	D60155	Great Southern Highway	Shire of Katanning
1	11.8ha	D3246	Great Southern Highway	Shire of Katanning

1.2 Operation

The Structure Plan is operative. The Henry Street Structure Plan has been adopted by the Shire of Katanning Council in accordance with Clause 14-20, Part 4, 16 Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. The structure plan was approved by the WAPC in accordance with Clause 22, Part 4, Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015.*

1.3 Staging

There is no staging proposed for this Structure Plan. The development sites will be released by Council as required.

1.4 Subdivision and development requirements

Land Use Permissibility

Permissible land uses within the Structure Plan area shall be in accordance with Table 4 of the Local Planning Scheme No 5.

Lot Sizes

Lot sizes should reflect the objectives of the structure plan to provide for rural based industries to complement existing abattoir operations that require large lot sizes not available within other industrial-zoned land.

A suggested lot layout is shown in Figure 4.1, with smaller lot sizes recommended for the central portion of the site. However, the Structure Plan does not dictate a specific range of lot sizes. Lot sizes and final layout will be determined at subdivision stage, and will be influenced by the local road network, servicing requirements (water and effluent disposal), buffer requirements for the specific land use, and development exclusion areas required for water resource protection and flood management.

1.5 Subdivision

Further studies

Preparation of the following documents, to the specifications of the Shire of Katanning, are to be submitted with any application for planning or subdivision approval in the Structure Plan area:

- Transport Impact Assessment
- Bushfire Management Plan
- Urban Water Management Plan as discussed in this Structure Plan
- Landscaping Plan addressing streetscape and aesthetic amenity along Great Southern Highway or any internal subdivision roads
- Watercourse assessment and Management Plan for lots affected by the Watercourse Setback Overlay. The Shire and/or WAPC may require the creekline, foreshore and flood fringe to be ceded for drainage purposes at subdivision and/or development stage.

1.6 Development

The following recommended requirements are based on the Katanning Flood Assessment and the endorsed LWMS included in Appendix 2.

Groundwater

The following to be undertaken to limit any impact of groundwater to the proposed development:

- Shape the surface of the site such so that run-off is directed away from buildings and does not pond adjacent to footings or pavements
- Carry out excavations to the required level, making sure to grade the surface of clayey soils to a gradient of at least 1% downhill (so that runoff is directed away from building areas)
- A building pad of free draining compacted sand of at least 0.5 m thickness (subject to design of surface drainage). The existing ground surface will need to be first graded to promote drainage
- All basin and drains to be underlined with clay (or similar) to ensure storm water runoff does not infiltrate the ground and raise the groundwater level.

Water Supply

Water is to be supplied by a water main extension from the existing reticulation on Pemble Street, or via suitable, sustainable and fit for purpose alternative supply to be considered on a case-by-case basis. Water supply should be supplemented by rainwater tanks and grey water for non-potable re-use.

Wastewater

Development on each lot is to be serviced by an approved on-site wastewater system, installed in accordance with Regulations and Standards applicable at the time. There is a

preference for Aerobic Treatment Units (ATU). Specific requirements are to be in accordance with the relevant State Policy.

Use of conventional septic systems may be considered, subject to further on-site testing and will require a suitably qualified practitioner to satisfactorily demonstrate to the Council and the Health Department of WA that effluent disposal will not cause adverse environmental or health impacts.

Soil around any onsite effluent disposal units will need to be improved with the importation and placement of an adequate thickness of granular fill.

Storm water Management

- All floor levels to be set a minimum of 500mm above the 100year water level of the creek
- The flood fringe impacts slightly on some lots and it is recommended the lot boundaries be cognisant of this issue.
- The developer of each lot will need to provide storage for storm water that allows discharge at predeveloped rates for the 1, 10 and 100-year events.
- Existing culverts to be lowered/upgraded to allow free drainage of the surrounding areas.
- Basins are recommended at each Lot with overflow to the open drains in the street via culverts (low flow) or rock lined spillway (high flow). Basins should be lined with clay to prevent groundwater recharge.
- The road is drained by open drains sized for the 1:10 year event. These will also serve to carry overflow from lot areas.
- Open drain outlets to be heavily vegetated with the vegetated areas to be sized at 2% of the connected impervious catchment area.

Contaminated Sites

- Further investigation will be required to determine the nature of the soil mounds located within the portion of the site south of Henry Street (indicated on Figure 1.1). There is the potential for buried material at this location to present an unacceptable risk to the environment and/or human health.

Vegetation retention

- Mature trees and other vegetation should be retained wherever possible. Disturbance to mature trees may require targeted surveys to determine habitat value for Carnaby's Cockatoo.
- Any disturbance to eucalypt woodlands is required to consider potential impacts to Priority species, including Carpet Python, Barking Owl, Bush stone-curlew and Western Strike-tit, in consultation with the Department of Biodiversity, Conservation & Attractions.

1.7 Other requirements

Internal Access Road

The Shire of Katanning will progress the dedication of the existing local road (Henry Street) within the Structure Plan area.

Great Southern Highway

Further consultation with Main Roads WA should occur as part of any subdivision or development application in the Structure Plan area.

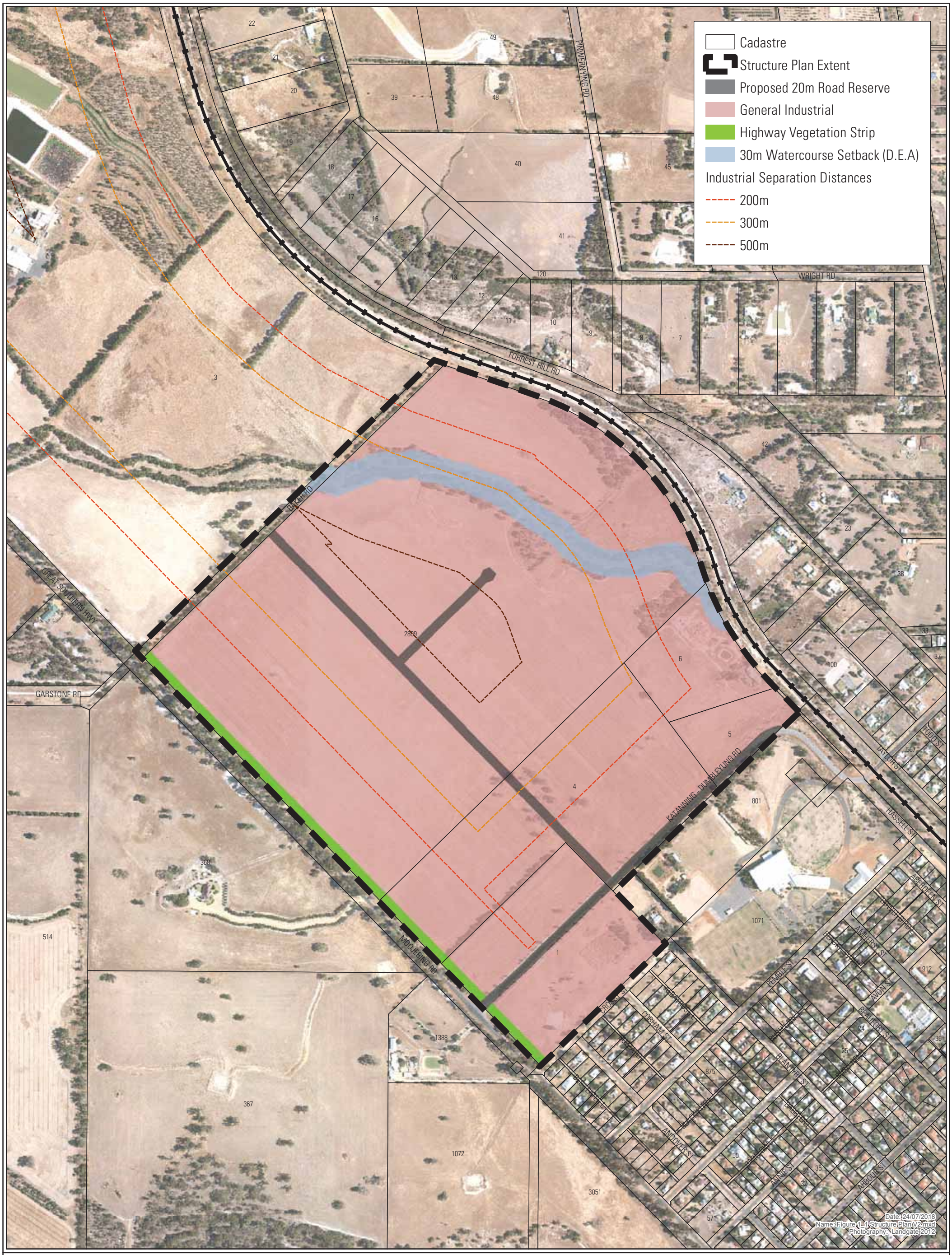
Protected pocket turn treatments may be required at the intersection of Great Southern Highway and the Katanning – Dumbleyung Road, depending on projected traffic movements and types of vehicles accessing the site. The Transport Impact Assessment should address this.

Realignment or upgrades to the 4-way intersection with Baker Road & Garstone Road made may be required.

No other access points from Great Southern Highway are proposed, and all lots should be serviced by the internal access roads.

Industrial Buffers

All development within the Structure Plan area shall have due regard to industrial buffer requirements stipulated by the Environmental Protection Authority and/or Western Australian Planning Commission. Development within the Structure Plan area should only be approved by Council if the Proponent can confirm that buffers can be contained within the bounds of the Structure Plan area.



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HENRY STREET STRUCTURE PLAN

FIGURE 1.1
STRUCTURE PLAN

PART TWO
Explanatory Section

2 Planning background

2.1 Introduction and purpose

WAMMCO are Western Australia's largest lamb processor and operate the abattoir in Katanning, north- west of the town site. The Henry Street Precinct Structure Plan area has been identified to provide limited industrial expansion to facilitate complementary land uses to the WAMMCO abattoir operations.

The Henry Street Precinct Structure Plan has been identified as a Development Investigation Area (DIA) 9 in the Local Planning Strategy with the following purpose:

> *'To provide limited industrial expansion to facilitate complementary land use to WAMMCO.'*

The Henry Street Precinct Structure Plan facilitates the development of the Structure Plan area for industrial uses that, subject to the discretion of Council, will complement the existing WAMMCO operation, and provide a suitable level of industry adjacent to the residential area.

2.2 Location and land description

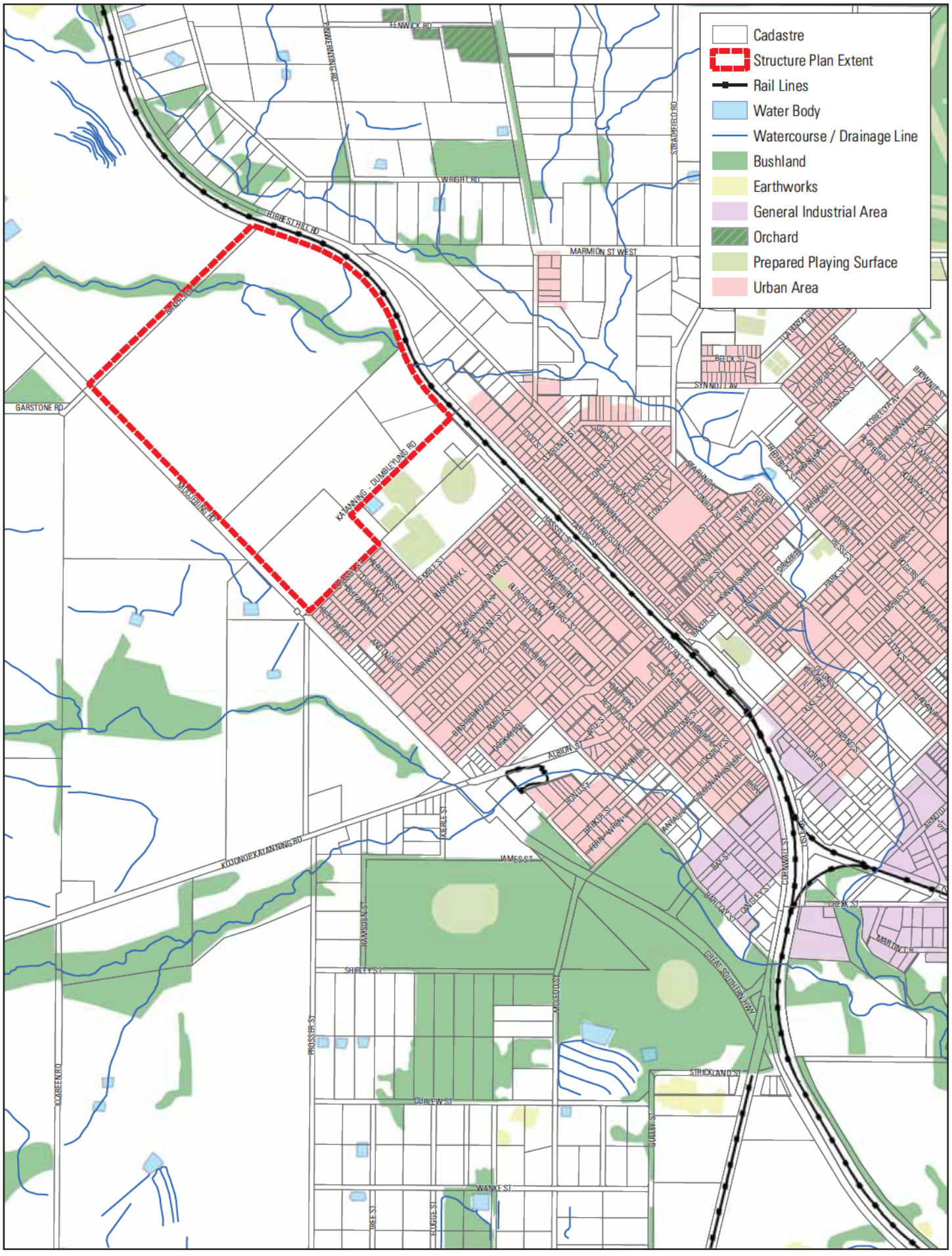
The Henry Street Precinct Structure Plan area is located north-west of the Katanning townsite. It is bounded by Forrest Hill Road to the east, Henry Street and Crosby Street to the south, Great Southern Highway and Trimmer Road to the west and the WAMMCO landholdings to the north.

The combined landholdings comprise 117 hectares which relates specifically to the lots described in Table 2.1.

Table 2.1 – Legal Description and Ownership

Lot	Lot Area	Title Details	Street address	Landowner
2809	77ha	DP117098	Great Southern Highway	Shire of Katanning
6	5ha	D60642	Forrest Hill Road	Shire of Katanning
5	3ha	D60642	Henry Street	Shire of Katanning
4	19ha	D60155	Great Southern Highway	Shire of Katanning
1	11.8ha	D3246	Great Southern Highway	Shire of Katanning

Existing land use across the Structure Plan area is rural.



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2

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HENRY STREET STRUCTURE PLAN

FIGURE 2.1
CONTEXT

2.3 Planning framework

Shire of Katanning Local Planning Scheme No. 5

The Henry Street Precinct Structure Plan area is currently zoned *Industrial Development* under the Shire of Katanning Local Planning Scheme No. 5 (LPS No.5) as indicated in Figure 2.2. The site was rezoned from *Rural* in previous Town Planning Scheme No.4 to *Industrial Development* under LPS No. 5 gazetted in February 2018.The WAMMCO site to the north-west is zoned *Special Use SU8.*

Figure 2.2: Local Planning Scheme No. 5 extract

The objectives of the zone relating to the Henry Street Precinct Structure Plan are outlined in Table 2.2 below.

Table 2.2 – Local Planning Scheme Zone Objectives

Zone	Objective
Industrial Development	•To designate land for future industrial development. •To provide a basis for future detailed planning in accordance with the structure planning provisions of this Scheme.

The Henry Street Structure Plan has been adopted by the Shire of Katanning Council in accordance with Clause 14-20, Part 4, Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. The structure plan was approved by the WAPC in accordance with Clause 22, Part 4, Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015.*

Table 2.3 below includes an extract from Table 9 of the Scheme which identifies the additional requirements that apply to the Henry Street Structure Plan. Additional provisions relating to drainage, water resource management and industrial buffers over the site may also be required. Particularly, consideration of land uses proposed on Lot 1 which lies adjacent to the residential area will only be approved if compatible and supports the requirements of the State Industrial Buffer Policy 4.1. The importance of maintaining the buffer requirement is further supported under the "Matters to be addressed in Structure Plans" under *Table 9 - Additional requirements that apply to land covered by the Structure Plan* detailed in Table 2.3 below.

The *Industrial Development* zone provides direction on land use whilst the structure plan is implemented. Following subdivision and/or substantial development, the *Industrial Development* zone may no longer apply, and the area may revert to an appropriate zone or a special use zone under the Scheme.

Table 2.3 – Extract from LPS No 5:

Table 9 – Additional Requirements that Apply to Land Covered by Structure Plan, Activity Centre Plan or Local Development Plan

Area No.	Description of land	Land Use Expectations	Matters to be addressed in Structure Plans	Associated Provisions
4	Henry Street Industry and Agricultural Foods	Limited rural based Industrial expansion	• Provision for rural based industries to complement existing abattoir operations that require large lot sizes not available within existing industrial zoned land. • Demand assessment for planning and investment. • Buffer and transitional landuse requirements to existing abattoir and residential landuses to be incorporated within structure plan area. • Buffers to be internal within structure plan area and not encroach on surrounding lots. • Drainage Management, including integration of storm water and groundwater management. • Protection of creekline, associated riparian zone and water quality. • Servicing and infrastructure requirements.	Environmental assessment shall be undertaken as part of structure pan process. Revegetation of cleared native and regrowth revegetation shall be at least double the area of clearing to allow for vegetation failure.

Katanning Super Town: Growth and Implementation Plan

The Growth Plan states that the Henry Street Precinct Structure Plan should *provide for limited industrial expansion for complementary uses.*

The overall Katanning Growth Plan Vision is:

> *Katanning will embrace its Aboriginal, agricultural, multi cultural and built heritage as it moves forward as a cohesive community seeking investment in economic, environmental and social infrastructure to achieve a population of 15,000, self-supporting growth and recognition as the inland heart of the Great Southern.*

The Economic Vision of the Growth Plan is:

> *To create the infrastructure and business environment required to encourage new enterprises and sustainable employment opportunities*.

A major business opportunity in achieving this vision included the action to *facilitate expansion of WAMMCO*.
The Growth Plan identifies a number of transformational projects based on their ability to contribute to the economic, social and environmental qualities of the town. Four key project areas are identified.

Project 2 is to support Residential and Industrial development with the objective of *ensuring that planning for the delivery of land, housing and infrastructure is sufficiently advanced to accommodate the growth of Katanning in a timely manner, and to pursue economic development and strategic infrastructure essential to economic growth and the creation of sustainable employment*".

Action 2.3 of this project area includes:

> *Facilitate Private Land Release for Industrial Purposes on existing Industrial use sites (WAMMCO), considering developing a dedicated Food Industry Precinct associated with WAMMCO and the new Saleyards.*

The Growth Plan notes that industrial growth could potentially occur to the south of the WAMMCO facility. Evidently there will be relationship in function between the two structure plan areas to support the Food Industry Precinct (Agrifood) business.

The agrifood sector consists of domestic and exporting primary producers, manufacturers and packagers of food and beverage products, from raw materials to finished products for the food service and retail segments. By locating complementary agrifood businesses in close proximity there are significant economies that could be realised as well as opportunities to improve the eco-efficiency of the businesses by utilising waste sources to create other value added products. The following industries have been identified in the Growth Plan as having the potential to be located in an agrifood precinct;

- Abattoir (beef, lamb, pork)
- Agribusiness goods and services
- Canning plant
- Chicken processing facility
- Containerisation park

- Dairy processors
- Freezer works
- Livestock exporters
- Packing house and grading facility for horticultural products
- Pet food company
- Sale yards
- Small goods (meat smoking, etc.)
- Transport hub/need to expand trucking depots
- Cereal Food and baking mix manufacture
- Beverage and malt manufacture
- Skin and Hide Treatment
- Various value-adding facilities (e.g. marinating meat, packaging meat and vegetables etc.)
- Feed Grains
- Tallow
- Fertiliser
- Flour mill/grains product manufacturer.

The Growth Plan recommends the following with relation to future industrial development:

- **Recommendation 29** - Investigate the feasibility of establishing a Centre for Agricultural and Engineering Excellence, with the intention to improving the sustainability, profitability across all aspects of the existing agriculture sector chains in Katanning – Producing, Handling, Processing
- **Recommendation 30** - Improve transport efficiency between Katanning, processing facilities and ports
- **Recommendation 32** - Promote sheep sales and look for expansion opportunities.

Through the establishment of an agrifood precinct there may be some scope to co-locate some complimentary industries adjacent to the existing abattoir. The Growth Plan recommends the following with relation to the WAMMCO site:

- **Recommendation 16** – Investigate the services and incentives needed to establish a beef processing train

- **Recommendation 17** – Ensure adequate buffers are maintained in future planning to ensure ongoing operation is not prejudiced

- **Recommendation 18** – Provide some limited development opportunities to south of abattoir to assist viability of beef chain upgrade

- **Recommendation 19** – Establish a working party to work closely with WAMMCO to identify and plan for:

    - Future expansion opportunities

    - Reducing impediments to growth

    - Ensure sufficient land is maintained to allow for potential expansion.

- **Recommendation 20** – Include WAMMCO as part of the Centre for Agricultural and Engineering Excellence

- **Recommendation 28** – Locate an Agrifood precinct in a location taking into account the location and linkages to WAMMCO

- **Recommendation 90** – Provide for limited expansion of industrial land south of WAMMCO where these uses will not extend the range of existing buffers and prejudice future urban expansion opportunities.

Shire of Katanning Local Planning Strategy (LPS)

The Henry Street Precinct Structure Plan area is identified as Development Investigation Area (DIA) 9 in the Local Planning Strategy with the following purpose:

> *To provide limited industrial expansion to facilitate complementary land use to WAMMCO.*

The Strategy states that the Henry Street Precinct Structure Plan area should incorporate the abattoir with potential for related rural industries to provide for additional abattoir investment and employment opportunities. The Strategy makes it clear that any such proposals must incorporate required buffers to the abattoir, related rural industries and adjoining residential development within the confines of the DIA boundary.

It identifies the following opportunities and environmental characteristics associated with DIA 9:

- Potential for only rural based industries to complement existing abattoir operation and expansion compatible with buffer requirements

- Predominantly cleared

The following constraints and issues are identified in the Strategy:

- Determination and justification of proposed complimentary land uses, development and lot sizes

- Buffer and transitional land use requirements to existing abattoir and residential land uses to be incorporated within DIA and Structure Plan area

- Buffer to be internal/ within DIA and not encroaching on surrounding lots
- Drainage management
- Protection of creekline and water quality
- Servicing and infrastructure requirements
- Highway visual impact.

Great Southern Regional Planning and Infrastructure Framework

The Framework defines a strategic direction for the future development of the Great Southern region over the next 20 years. It highlights the opportunities for economic development and infrastructure priorities for the region, and addressed land use planning response to future growth and development pressures.

The framework recognises Katanning as part of the "Regional Centres Development Plan" and as a sub-regional centre that offer services and facilities which provide for the needs of the local community and that of the rural population in their sub-regional hinterland.

In terms of economic growth, the Framework recognises that there are opportunities to increase value of livestock and livestock products in the region and that the new Katanning sale yards will play an important role in supporting this growth. The gold mining operation near Katanning is identified in the Framework as a potential employer in the region, especially during the construction phase. It notes that attracting residents to live in the area would provide the greatest economic benefit to the region. Jobs in the manufacturing, service sector and retail should grow as a result.

Regarding services and infrastructure, the Framework notes that there will also be a need to provide a higher level of infrastructure and services in Katanning that also services a number of smaller rural communities in the northern part of the region. It is hoped that through the higher level of accessibility and services this will increase the attractiveness of the town in retaining and growing population. This will lead to a growth in the provision of retail, employment, recreational and other activities. Katanning is supplied by the Great Southern Towns Water Supply Interconnected Scheme, however Water Corporation plans to phase out reliance in this area on local water sources and focus on reducing risk and securing safe drinking water. SuperTown planning for Katanning could include a major upgrade to the Narrogin-Katanning connection to the Harris Dam.

The preparation of this Structure Plan is supported by recommendation A43 which is to plan for population growth in Albany and the sub-regional centres – Local planning strategies and schemes for Katanning to provide sufficient zoned land to accommodate a range of services such as retail, administrative, general health and specialist health, education, recreation, community and entertainment. This Structure Plan is the first stage in the future planning for DIA 9 – WAMMCO.

State Planning Policies

A number of State Planning Policies (SPP) are relevant to the Henry Street Precinct Structure Plan. These are outlined in Table 2.4 below.

Table 2.4 – State Planning Policies

SPP	Description	Comment
SPP 1 State Planning Policy Framework (Variation No. 2)	SPP 1 helps guide the decision-making process in regards to land use and development in WA. It indicates which policies and strategies the WAPC and the Department of Planning should refer to when making decisions. It provides a list of all the plans, policies and strategies that form a part of the State Planning Framework.	SPP 1 should be referred to during the preparation of the WAMMCO structure plan and the relevant policies which should be referred to.
SPP 2 – Environment and Natural Resources	SPP 2 defines the principles and considerations that represent good and responsible planning in terms of environment and natural resource issues within the framework of the State Planning Strategy.	A number of environmental features have been taken into consideration in the preparation of the WAMMCO structure plan. These features will be appropriately protected through the provision of setbacks and open space.
SPP 2.9 – Water Resources	This policy provides clarification when taking water resources into account in the planning process.	A number of minor watercourses are located within the structure plan area. These features will be appropriately protected through the provision of setbacks and open space.
SPP 3 – Urban Growth and Settlement	The aim of this policy is to facilitate sustainable patterns of urban growth and settlement by setting out the requirements of sustainable settlements and communities and the broad policy in accommodating growth and change.	No urban development is proposed, however the site adjoins existing residential to the west.
SPP 3.1 – Residential Design Codes	This Policy provides a comprehensive basis for the control of residential development throughout Western Australia.	No urban development is proposed in the WAMMCO structure plan.
SPP 3.6 Development Contributions for Infrastructure	This policy aims to promote the efficient and effective provision of public infrastructure and facilities to meet the demands arising from new growth and development and to ensure that development contributions are charged equitably among those benefiting from the infrastructure and facilities to be provided.	Development contributions will be considered during the more detailed planning stages.

SPP	Description	Comment
SPP 3.7 –Planning for Bushfire Risk Management	This policy should be used to inform and guide decision-makers, referral authorities and proponents to achieve acceptable fire protection outcomes on planning proposals in bush-fire prone areas.	A bushfire hazard assessment has been undertaken for the structure plan area. The bushfire risk is predominantly low. A Bushfire Management Plan will be required as part of further planning.
SPP 4.1 – State Industrial Buffer Policy (draft)	This policy applies to planning decision-making, and proposals which seek to provide for new industrial areas and uses, and essential infrastructure, sensitive land uses in proximity to existing industrial areas.	The buffers and separation distances recommended in SPP 4.1 will need to be considered as part of the structure plan process. Adjoining sensitive land uses will need an adequate separation distance from proposed industrial uses. The Structure Plan has specifically referred to industrial buffers needing to be maintained within the bounds of the Structure Plan.
SPP 4.3 Poultry Farms Policy	This policy is to guide planning and development applications for land in the vicinity of poultry farms and for the development of poultry farms. Conflicts which can arise between poultry farms and residential, rural-residential and other developments because of the odours, noise, dust and visual impacts associated with poultry farms	No poultry farms are located in close proximity to the WAMMCO structure plan area and no farms are proposed as part of the development.
SPP 5.2 Telecommunications Infrastructure	The policy provides a framework for the preparation, assessment and determination of applications for planning approval of telecommunications facilities.	No telecommunication infrastructure is proposed as part of the Henry Street Precinct Structure Plan.
SPP 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning	This policy aims to promote a system in which sustainable land use and transport are mutually compatible.	No sensitive land uses are proposed in the structure plan, therefore it is considered that noise from road and rail should not be a significant issue.

WAPC Development Control Policies

Relevant WAPC Development Control (DC) Policies are discussed in the table below.

Table 2.5 – Development Control Policies

Policy	Description	Comment
DC Policy 1.1 – Subdivision of Land – General Principles	This policy sets out the general principles used by the WAPC in determining applications for the subdivision of land. It specifies the WAPC's basic requirements for the creation of new lots as well as the procedures it will follow in processing subdivision applications.	It's important that the information required by the WAPC is included in the Structure Plan and any future subdivision applications in accordance with DC 1.1.
DC Policy 1.7 – General Road Planning	The policy establishes requirements for land contributions and the construction of various categories of roads and outlines principles that apply to aspects of the planning and provision of all types of roads.	This policy should be referred to at the detailed planning stage.
DC 2.3 – Public Open Space in Residential Areas	This policy sets out the requirements of the Commission for public open space and the provision of land for community facilities in residential areas. The basic component is the requirement that 10 percent of the gross subdivisible area of a conditional subdivision shall be given up free of cost by the subdivider for public open space.	This policy should be considered in conjunction with DC 4.1 Industrial Subdivision when determining the area for public open space.
DC 4.1 – Industrial Subdivision	This policy provides guidance on the matters considered by the WAPC when determining applications for industrial subdivision throughout the state. These include such matters as the design and shape of industrial lots, road layout, servicing and open space requirements.	This policy should be referred to in the detailed planning stage.

EPA Position Statements

Relevant EPA Position Statements are discussed in the table below.

Table 2.6 – EPA Position Statements

Policy	Description	Comment
Position Statement 2 – Environmental Protection of Native Vegetation in WA	This Statement addresses the issues of native vegetation clearing in WA, particularly in agricultural areas. The EPA has previously stated that *all existing remnant native vegetation is important, and it should be managed to ensure its retention.* It states that the EPA could possibly support clearing in agricultural areas providing the proposal has a net environmental benefit, the area to be cleared in relatively small and that any residual land degradation will not be intensified.	The Structure Plan area comprises small areas of native vegetation and parkland cleared trees. It is important that the principles of this position statement are given due consideration, however it is considered that the areas to be cleared as part of the structure plan proposals will be relatively small given most of the site is already cleared.
Position Statement 3 – Terrestrial Biological Surveys as an Element of Biodiversity Protection	The EPA has prepared this Position Statement to ensure that the issue of biological diversity is recognised as being of importance in the land use planning process and to ensure that minimum standards of survey work are undertaken to enable the EPA to undertake an assessment of a proposed activity.	The provisions of this position statement are to be followed in the preparation of flora and fauna surveys across the structure plan area.
Position Statement 4 – Environmental Protection of Wetlands	The Position Statement defines important environmental values and functions of wetlands and establishes principles for the environmental protection of wetlands in general. It suggests land use zoning should be applied so as to achieve sustainable water resources management and protect the beneficial functions performed by wetlands as part of that process.	No wetlands are located within the structure plan area, however some minor watercourses are located throughout which will need adequate protection in accordance with the general principles of this Position Statement.
Position Statement 7 – Principles of Environmental Protection	This position statement sets the scene for environmental management in WA. Key principles include the precautionary principle, conservation of biological diversity and ecological integrity, waste hierarchy, best practice, accountability and transparency and enforcement.	The future structure planning process should pay particular regard to the principles contained within the statement.
Position Statement 9 – Environmental Offsets	This statement provides guidance on environmental offsets to ensure a 'net conservation benefit' to proposals.	This statement will need to be referred to if environmental offsets are required as part of the project. Considering the environmental values of the site are not significant and the impact will be low, environmental offsets may not be required.

EPA Guidance Statements

Relevant EPA Guidance Statements are discussed in the table below.

Table 2.7 – EPA Guidance Statements

Policy	Description	Comment
Guidance Statement No. 3 – Separation Distances between Industrial and Sensitive Land Uses	This statement provides guidance on the generic separation distances between sensitive and industrial land uses to avoid conflicts between these uses. It aims to protect sensitive land uses from unacceptable impacts on amenity that may result from industrial activities, emissions and infrastructure. Impacts from emissions include noise and air emissions (gases, dust and odours). Types of sensitive land uses include residential development, public services (hospitals, schools, shopping centres, playgrounds etc), tourist development (caravan parks and hotels) and some public buildings.	The separation distances provided in this statement will be generally applied to the structure plan and will need to be further refined at a detailed planning stage once the exact land uses are determined. It is understood that this guidance statement is currently under review. The Structure Plan has specifically referred to industrial buffers needing to be maintained within the bounds of the Structure Plan.
Guidance Statement No. 8 – Environmental Noise	This statement provides guidance to proponents submitting proposals for environmental impact assessment to ensure that noise emissions comply with the *Environmental Protection (Noise) Regulations 1997*. Noise is defined in the Environmental Protection Act as vibration of any frequency, whether transmitted through air or any other physical medium.	The general principles in this statement will be applied to the structure plan. However, noise will need to be further considered further once the exact land uses are determined.
Guidance Statement No. 19 – Environmental Offsets Biodiversity	This statement provides advice on environmental offsets for proposals or schemes that impact on biodiversity. It is to be read in conjunction with Position Statement No. 9 but provides more specific advice particularly in relation to the technical application of biodiversity offsets.	This statement will need to be referred to if environmental offsets are required as part of the project. Considering the environmental values of the site are not significant and the impact will be low, environmental offsets may not be required.
Guidance Statement 33 – Environmental Guidance for Planning and Development	This statement provides an overview of information to assist proponents and decision making authorities in considering environmental management as part of the planning and development process. It also contains guidance for the Environmental Impact Assessment process	The information in this statement has been referred to in the environmental assessment of the structure plan to ensure that all relevant information is provided. Further detailed assessments may be required once the details of the development have been more accurately determined.
Guidance Statement No. 51 – Terrestrial Flora and Vegetation Surveys for	This statement provides direction and information on the general standards and protocols for	This statement should be referred to in the preparation of vegetation and flora surveys and reports.

Policy	Description	Comment
Environmental Impact Assessment in Western Australia	terrestrial flora and vegetation surveys as part of the environmental impact assessment process.	
Guidance Statement No. 55 – Implementing Best Practice in Proposals Submitted to the Environmental Impact Assessment Process	This statement provides guidance on what the EPA means by the term 'best practice' when it is used in the environmental impact assessment process and the approach the EPA will take when assessing proposals. It has a particular focus on human health and the environment as affected by, but not confined to, industrial processes.	The guiding principles in this statement should be referred to at a more detailed planning stage once the exact land uses and industries are more clearly determined.
Guidance Statement No. 56 Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia	This statement provides direction and information on the general standards and protocols for terrestrial fauna surveys as part of the environmental impact assessment process.	The statement should be referred to in the preparation of fauna surveys and reports.

SPP 4.1 – State Industrial Buffers.

This policy provides guidelines to better ensure the safety and amenity of surrounding land uses.
A number of objectives and principles are established in the policy, along with an explanation as to how these principles should be applied to define and secure buffer areas and who should pay for them.
The objectives of this policy are as follows:

- To guide the definition of buffer areas around industry, infrastructure and some special uses
- To protect industry, infrastructure and special uses from the encroachment of incompatible land uses
- To enable a higher level of the safety and amenity of land uses surrounding industry, infrastructure and special uses
- To recognise the interests of existing landowners within buffer areas who may be affected by residual emissions and risks, as well as the interests, needs and economic benefits of existing industry and infrastructure which may be affected by encroaching incompatible land uses.

The policy will be useful to determine the limit of impacts from the proposed uses within the Structure Plan area to ensure that cumulative impacts of uses will not extend beyond the boundary of the Structure Plan.

Other approvals and decisions

WAMMCO have advised that the current plant has the capacity to facilitate any increase in operations should this occur at some point in the future. These will generally be included within the current development footprint and infrastructure, and therefore no large scale physical expansions are foreseen.

3 Site conditions and constraints

3.1 Biodiversity and natural area assets

Vegetation

A Level 1 vegetation and flora survey was undertaken by Terratree in September 2014 in accordance with EPA Guidance Statement 51. A search was undertaken of the following databases within a 20km radius of the site:

- DPAW's Threatened and Priority Flora
- DPAW's Threatened Ecological Communities
- WA Herbarium (WAH) Declared Rare and Priority Flora
- Department of the Environment's Projected Matters Search Tool.

A total of 41 significant florae were recorded on the databases. No species of Threatened Flora (Declared Rare Flora) pursuant to the WA Wildlife Conservation Act 1950 or listed as Threatened pursuant to the EPBC Act 1999 were recorded during the targeted search or the Level 1 vegetation survey. As the site is cleared of native vegetation, no flora species of conservation significance were identified at the site.

Vegetation condition at the site was classified as being 'completely degraded' (according to the scale by Keighery (1994)) as the vegetation is no longer intact and the area is completely or almost completely without native species. The vegetation can be described as 'parkland cleared' with the flora compromising weed or crop species with isolated trees or shrubs (Terratree, 2014).

Several older remnant eucalypts are located along Barker Road and at the south-east along the creek. There is a possibility that these eucalypts could contain hollows which have habitat value for native fauna.

There were no Threatened or Priority Ecological Communities identified within a 20 km radius of the site.

A complete copy of the Flora and Fauna Assessment by Terratree (2014) is provided within Appendix 1.

Fauna

A Level 1 fauna survey was undertaken by Terratree in September 2014 in accordance with EPA Guidance Statement 56. A search was undertaken of the following databases within a 20km radius of the site for records of known Threatened, Schedule and Priority Fauna:

- DPaW's Threatened Fauna
- Department of the Environment's Projected Matters Search Tool.

A total of 32 species of conservation significance were identified within the search area. An assessment of habitat value identified the likelihood of the following species to potentially occupy the site: Australian Painted Snipe and Bush Stone-curlew. The mature trees on Barker Road and along the watercourse could also have habitat value for Carnaby's Black Cockatoo. No fauna species of conservation significance were identified at the site. It is unlikely that habitat will be affected as a result of development on the site, however this

matter will require further consideration as subdivision designs and development proposals are refined further over time.

A complete copy of the Flora and Fauna Assessment by Terratree (2014) is provided within Appendix 1.

Opportunities and constraints

There are few environmental constraints that would preclude development of the site for its intended use (Talis, 2014). The site has been historically cleared and vegetation in degraded condition. There is no flora and fauna of conservation significance and vegetation has limited value as a habitat for fauna of conservation significance. There are no significant biological constraints to development on site. The only exceptions which may need further consideration include:

- Disturbance to mature trees may require targeted surveys to determine habitat value for Carnaby's Black Cockatoo
- Any disturbance to eucalypt woodlands is required to consider potential impacts to Carpet Python (Schedule 4), Barking Owl (Priority 2), Bush Stone-curlew (Priority 4) and Western Shrike-tit (Priority 4) in consultation with DPaW.

3.2 Landform and soils

Topography

The site gently slopes from the north to south-east. The highest point is at the northern part of the site at approximately 350m AHD and slopes to approximately 320m AHD.

Geology

The Dumbleyung Geology series map 1:250,000 scale indicated the site is underlain by:

- colluvium and minor alluvium described as silt, sand and gravel; generally, on slopes adjoining to rock and laterite outcrops

- laterite described as limonite cemented, nodular and massive duricrust; overlies deeply weathered bedrock

- biotite granite and adamellite described as *medium and coarse, even-grained; locally fioate*' (Galt, 2014).

The assessment by Galt Geotechnics, 2014, found that the site is underlain by sandy clay to clayey sand. A copy of the report can be found within Appendix 1.

Soils

The generalised soil profile of at the site is described by Galt Geotechnics (2014) as:

- SAND/Clayey SAND/Silty SAND – fine to coarse grained, approximately 3% to 20% non-plastic to low plasticity fines, locally with some fine to medium grained, rounded to sub-rounded gravel, dark grey becoming grey, sand is generally loose, clayey material is generally soft to firm, moist to wet, trace organics and rootlets, present from the surface, extending to depths of between 0.1m and 0.8m; overlying
- Clayey SAND/Sandy CLAY – fine to coarse grained sand, low to medium plasticity clay fines, generally pale brown to orange brown mottled grey, trace to some fine grained gravel, firm to hard, moist to dry, locally laterised, locally present from the surface, extending to depths of between 0.6m and 1.9m; locally overlying
- CLAY – low plasticity, white locally mottled grey and red-brown, trace fine grained sand, trace quartz, locally present from as shallow as 0.6m, extending to the maximum depth of investigation of 2.3m.

Geotechnical Investigations

Geotechnical investigations were conducted between 1 and 5 September 2014 by Galt Geotechnics (Appendix 1). A total of 20 test pits extending to depths between 0.9m and 2.5m below the surface level were installed by Galt. The assessment was conducted in accordance with Australian Standard AS2870-2011 *Residential Slabs and Footings*. Based on the findings, the site is classified as 'Class M' provided that the site preparation recommendations are followed. Galt (2014) considers that the site is "*geotechnically capable of supporting the proposed light industrial subdivision development*". Galt also recommends that future buildings should be built on a built up pad of free draining compacted sand of at least 300 mm thickness.

The assessment also concluded that the underlying clayey material is unsuitable for onsite effluent disposal by percolation (however this can be improved with importation and placement of an adequate thickness of granular fill). Development will require further assessment of land capability and will need to comply with the Government Sewerage Policy.

Acid Sulphate Soils

Acid sulphate soil data by the Department of Environment Regulation (DER)is not available for the site, however the CSIRO's ASRIS (2014) data show that the site is in an area with *Low Probability/Very Low Confidence* of acid sulphate soils occurring (Talis, 2014).

Contaminated Sites

Talis (2014) has observed buried material on Lot 1 (D3246) at the southern extent of the site which will need further investigation for contaminated sites prior to development. The rest of the structure plan area does not include any contaminated sites and therefore will be no implications for the development of the site for industrial purposes.

Talis (2014) have recognised that there *is potential for contamination to have previously occurred/to occur* in association with the adjacent WAMMCO abattoir. The DER identifies an abattoir is a *potentially contaminating industry/land use*. Further investigation of the ponds on the WAMMCO site will be required to determine the likelihood of contamination, however Talis (2014) has indicated that *these structures are unlikely to have a significance impact on development of the surrounding land*.

It should be noted that this area is now outside of the Structure Plan boundary and should not result in any implications for the development of the Structure Plan area for industrial purposes.

Opportunities and Constraints

The geotechnical assessment concluded that the site is classified Class 'M' provided that the site preparation recommendations are followed. Based on the preliminary geotechnical investigations, the site is *geotechnically capable of supporting the proposed light industrial subdivision development* (Galt, 2014), however more detailed investigations are required.

The underlying clayey material is unsuitable for onsite effluent disposal by percolation.

Acid sulphate soils are not considered to be an issue that will require further management.

Talis (2014) identified potential for contamination at the WAMMCO site (in particular the wastewater ponds) and the buried material on Lot 1 at the southern extent of the site. These areas will need further investigation.

3.3 Hydrology

Groundwater

The site is not located within any proclaimed groundwater area (as identified in the *Rights in Water and Irrigation Act 1914*) and as a result water may be taken from the area provided it is not from an artesian aquifer or affect downstream users through diminished flow.

Perched groundwater was identified at depths between 0.5m and 0.6m at three locations by Galt Geotechnics during the geotechnical investigations in 2014. This could be as a result if recent rainfall in the days preceding fieldwork and the water remaining on top of the surficial clayey soils.

The nearest WIN site (ID: 60912739) with recorded groundwater levels is located 1.5km to the north-east of the site. Static groundwater level at this site was recorded as 0.7m bgl. Additionally, a review of the *Katanning Town Groundwater Program 2003 Drilling Bore Completion and Test Pumping Report* (Global Groundwater, 2004) prepared for the Shire of Katanning showed a groundwater bore (03KC02D) located approximately 430m south-east of the site, which showed static groundwater level to be 2.5m bgl in May 2003 (Talis, 2014).

Whilst a shallow groundwater depth may be viewed as a constraint to residential development, additional groundwater investigations would be recommended to identify quantities of fill material required to be imported to the site to raise levels for development (Talis, 2014). Based on Galt's 2014 preliminary geotechnical investigations, for drainage purposes, the buildings should be built on a built up pad of free draining compacted sand of at least 300 mm thickness.

Surface Water

The Katanning Town Creek runs through the centre of the site, from west to east. The creek flows into town (Piesse Park) and there is some native vegetation situated along the creekline. It is likely that the Katanning Town Creek will need to be retained and a buffer retained on either side to mitigate potential impacts from future land uses.

No FPM 100 year ARI area is mapped within or immediately surrounding the site.

3.4 Bushfire hazard

A Bushfire Hazard Assessment was conducted across the site by Bushfire Prone Planning (2014). The rating on the existing vegetation within the subject site was a combination of *Low* and *Moderate* with a small percentage as extreme to the north. External to the WAMMCO site, the Bushfire Hazard is a combination of *Low, Moderate* and *Extreme*. The threat external to the subject site is predominately *Low* and *Moderate*.

A complete copy of the Bushfire Hazard Assessment is at Appendix 3.

Opportunities and Constraints

The vegetation classified as *moderate* risk is within the WAMMCO site and along the creekline. A majority of the site has a *low* bushfire hazard and therefore is fairly unconstrained by bushfire hazard.

3.5 Heritage

Aboriginal Heritage

A search for relevant Aboriginal Heritage was conducted by Talis (2014) using the DAA online *Aboriginal Heritage Inquiry System* which indicated that the site was not list as a *Registered Aboriginal Site* or *Heritage Survey Area*.

One *Other Heritage Place* is located near the structure plan area; the Katanning Town Creek (ID 22816) which runs along the eastern boundary of the northern half of the site. Two *Other Heritage Places* are located in the vicinity; Katanning Reserve (ID S2801) and Katanning (ID S00285). Three *Heritage Survey Areas* are located in the vicinity; two are located on Great Southern Highway on the western boundary of the site (ID 16482 and ID 17057) and the third is located adjacent to the northern boundary (ID 27384).

European Heritage

An online search of the Australian Government's Department of Environment Heritage Database by Talis (2014) found that no recorded Australian heritage listed sites at the site or within the vicinity of the site (<500m).
An online search of the Heritage Council WA database by Talis (2014) using the *inHerit* portal found that no recorded sites of European heritage from the State register occur at the site.

Opportunities and Constraints

No European Heritage or Registered Aboriginal sites were listed at the site. The Katanning Town Creek (listed as *Other Heritage Places*) runs through the Structure Plan area in the northern sector and along the eastern side of the site. The creekline which runs through the site is not part of the listed heritage site and will not be developed in order to protect environmental values. It is therefore considered that the site is not constrained by heritage values however at the time of subdivision, further advice should be sought from the Native Title holders of the area.

3.6 Buffers

The WAMMCO abattoir has an industry buffer of 1,000m. However, given that a complementary land use is proposed for the site which is not considered to be a sensitive land use under Guidance Statement No. 3, a site-specific buffer would be required to be considered depending on the nature of the proposed land-use. In relation to the future development of the site, consideration will be required in relation to providing adequate buffers for noise, dust and odour emissions from the new development and the residential and rural properties adjacent to the site (Talis, 2014). The offsite impacts of the abattoir extend across the Henry Street Structure Plan as indicated on Figure 3.1. This may require consideration in addressing the cumulative impact of industry as it relates to containing impacts within the structure plan boundary as the area develops overtime.

3.7 Servicing and infrastructure

A review of services and infrastructure was undertaken by Shawmac Consulting Engineers in 2014. A complete copy of the report is provided at Appendix 4.

Electrical

The Katanning Town Site currently has 5-10MVA capacity remaining in terms of power availability which will drop to <5MVA in 2019. This allows for the development of approximately 1,000 residential dwellings from 2019 onwards on a first come, first serve basis, the development capacity substantially reduces if industrial and commercial lots are developed. Once the power capacity is reached, significant works would be required to source power from other areas to facilitate future development. It is expected that the power availability be a major constraint to development within the town site.

Water and Wastewater

There is no Water Corporation planning for the majority of the town and any headworks would need to be funded by the developers. Water may be supplied by a water main extension from the existing reticulation on Pemble Street, but this is to be confirmed through

Water Corporation planning and subject to understanding the specific land uses and their water demands.

The subject land is not intended to be connected to the Water Corporation's reticulated sewerage system. Wastewater from each Lot will be required to be disposed though installation of an approved on-site effluent disposal unit. Any such apparatus shall conform to the Statutes and Policies applicable at the time, and the specific recommendations set out in Part 6.2 of the endorsed Local Water Management Strategy.

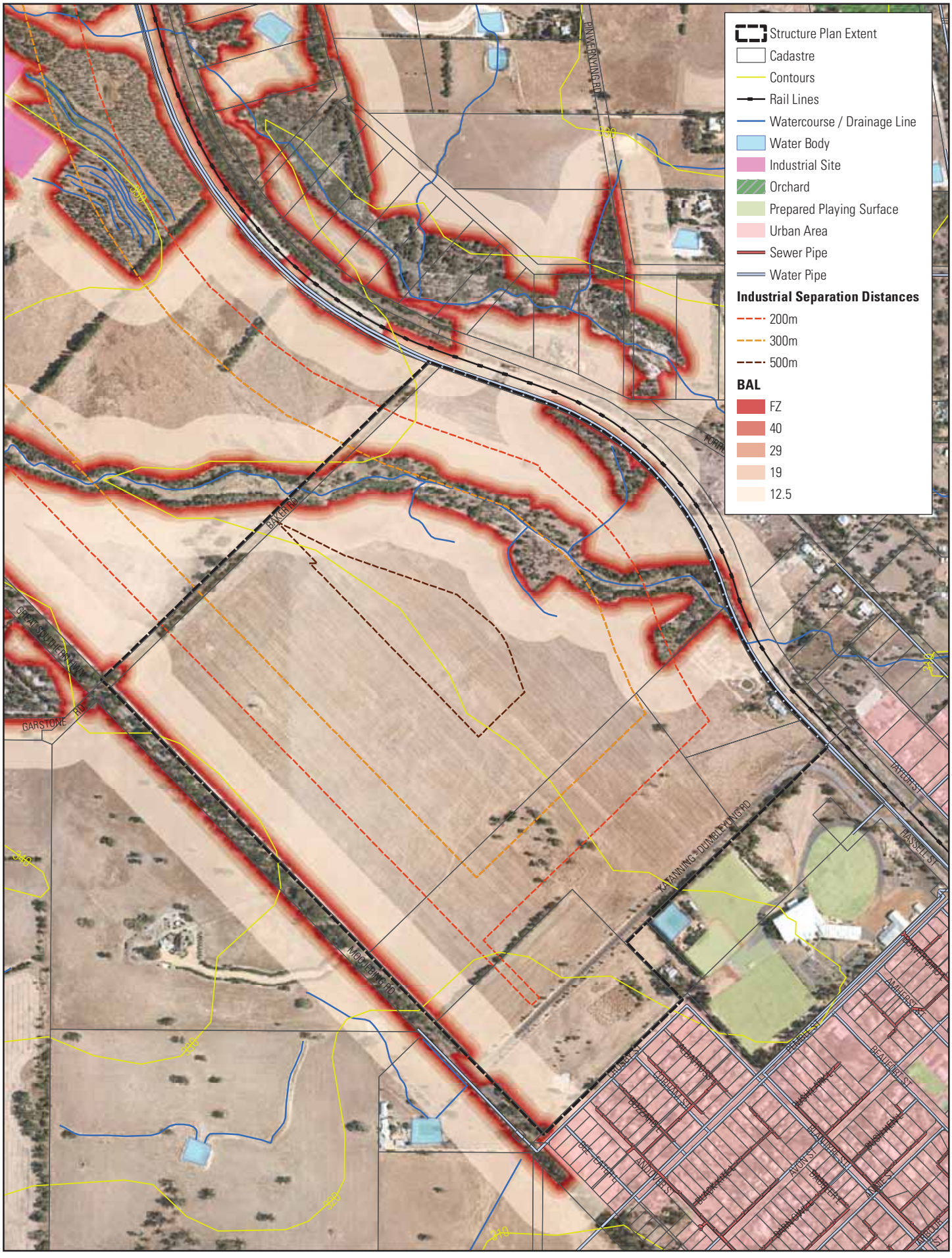
The geotechnical assessment also concluded that the underlying clayey material is unsuitable for onsite effluent disposal by percolation (however this can be improved with importation and placement of an adequate thickness of granular fill) (Galt Geotechnics, 2014) Appendix B within Appendix 1).

Gas

There is no gas reticulation available within the town site.

Communications

Phone services and ADSL are provided in the town. At present, NBN rollout has not commenced in the town site however will be implemented in future. Optus maintains a fibre optic network through much of the town which may provide broadband services. Telstra would be required to service any future development in the absence of NBN or interest from other communications providers.



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HENRY STREET STRUCTURE PLAN

FIGURE 3.1
SITE CONDITIONS & CONSTRAINTS

4 Landuse and subdivision requirements

The Henry Street Precinct Structure Plan area has been identified to provide limited industrial expansion to facilitate complementary land uses to the WAMMCO abattoir operations.

4.1 Land use

Land use is controlled by the operative Local Planning Scheme. LPS No.5 designates the site as 'Industrial Development' zone. The Structure Plan area is also included within Table 9 - Additional Requirements.

Rezoning to *General Industry* will be required in the future to ensure suitable permissibilities over the site. Additional Scheme provisions may also apply to the Structure Plan area."

Table 4.1 – Structure Plan Summary Table

Item	Data
Total area covered by the Structure Plan	117.75ha
Industrial Lots	113.83a
Highway Vegetation Strip	2.48ha
Indicative Lot Yield – Industrial	15 lots

Note: Table is repeated in Executive Summary

4.2 Subdivision

Lot sizes

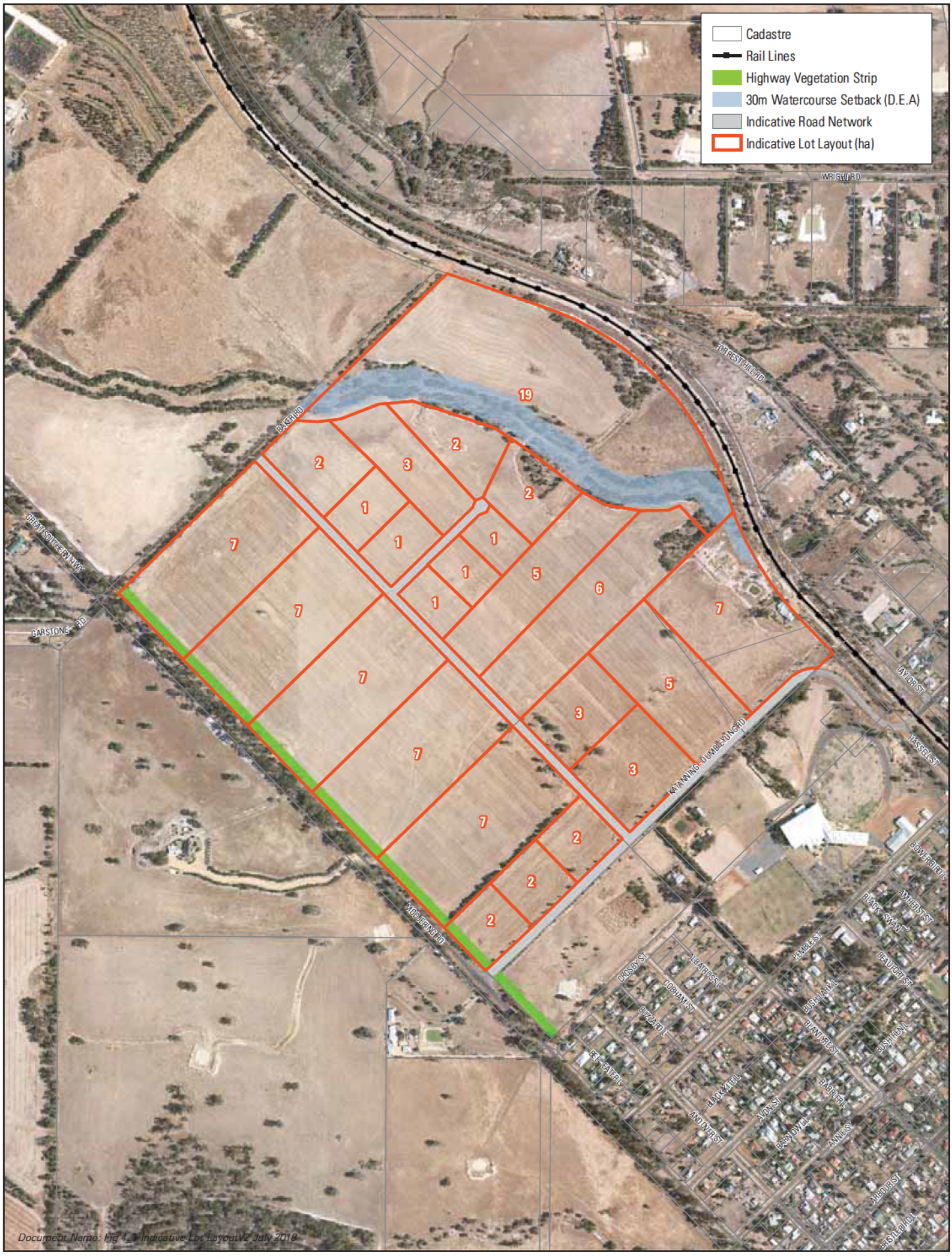
Lot sizes should reflect the objectives of the structure plan to provide for rural based industries to complement existing abattoir operations that require large lot sizes not available within other industrial-zoned land.

A suggested lot layout is shown in Figure 4.1, with smaller lot sizes recommended for the central portion of the site. However, the Structure Plan does not dictate a specific range of lot sizes. Lot sizes and final layout will be determined at subdivision stage, and will be influenced by the local road network, servicing requirements (water and effluent disposal), buffer requirements for the specific land use, and development exclusion areas required for water resource protection and flood management.

Further studies

Preparation of the following documents, to the specifications of the Shire of Katanning, are to be submitted with any application for planning or subdivision approval in the Structure Plan area:

- Transport Impact Assessment
- Bushfire Management Plan
- Urban Water Management Plan as discussed in this Structure Plan
- Landscaping Plan addressing streetscape and aesthetic amenity along Great Southern Highway or any internal subdivision roads
- Watercourse assessment and Management Plan for lots affected by the Watercourse Setback Overlay. The Shire and/or WAPC may require the creekline, foreshore and flood fringe to be ceded for drainage purposes at subdivision and/or development stage.



Document Name: Fig 4_1 Indicative Lot LayoutV2 July 2018

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PLANNING DESIGN ENVIRONMENT

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HENRY STREET STRUCTURE PLAN

FIGURE 4.1
INDICATIVE LOT LAYOUT

4.3 Development

The following recommended requirements are based on the Katanning Flood Assessment and LWMS at Appendix 2.

Groundwater

The following to be undertaken to limit any impact of groundwater to the proposed development:

- Shape the surface of the site such so that run-off is directed away from buildings and does not pond adjacent to footings or pavements
- Carry out excavations to the required level, making sure to grade the surface of clayey soils to a gradient of at least 1% downhill (so that runoff is directed away from building areas)
- Area of any proposed building envelopes is built up with a pad of free draining compacted sand of at least 0.3 m thickness (subject to design of surface drainage). The existing ground surface will need to be first graded to promote drainage
- All basin and drains to be underlined with clay (or similar) to ensure stormwater runoff does not infiltrate the ground and raise the groundwater level.

Water Supply

Water is to be supplied by a water main extension from the existing reticulation on Pemble Street or via suitable, sustainable and fit for purpose alternative supply to be considered on a case-by-case basis. Water supply should be supplemented by rainwater tanks and grey water for non-potable re-use.

Wastewater

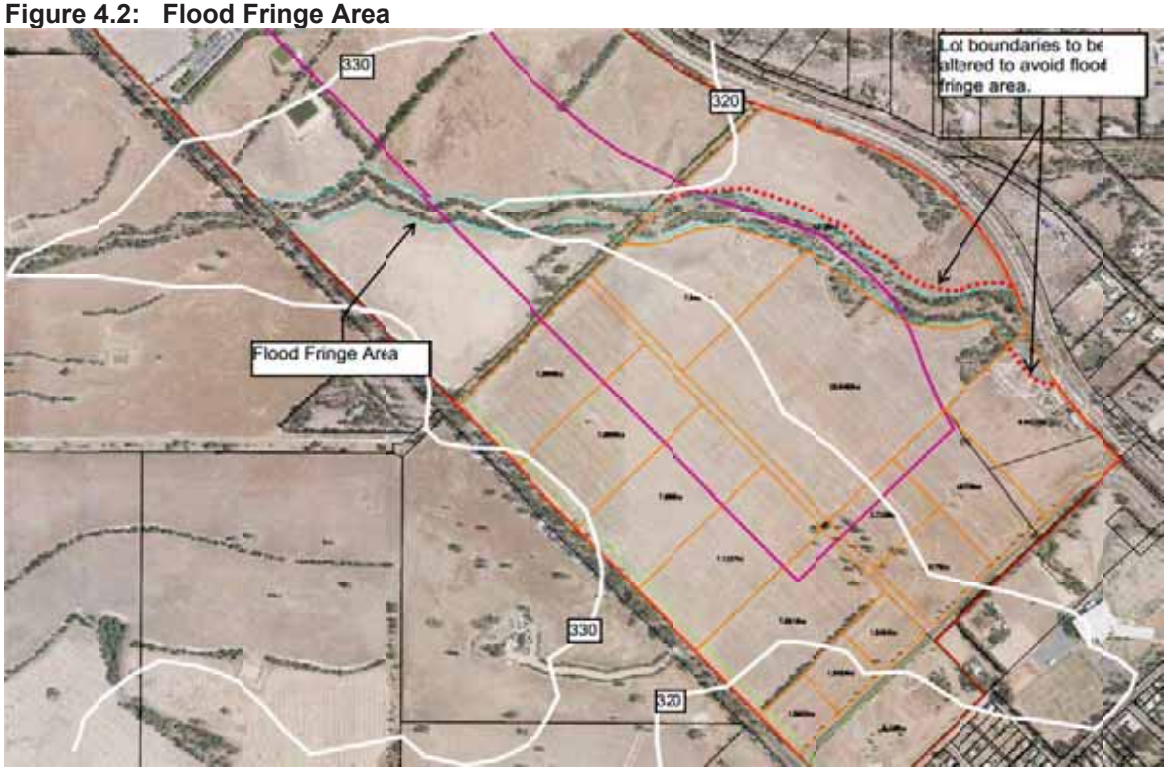
Each lot is to be treated by an Aerobic Treatment Unit approved by the Department of Health, in accordance with the Government Sewerage Policy. Soil around any onsite effluent disposal units will need to be improved with the importation and placement of an adequate thickness of granular fill.

Stormwater Management

- All floor levels to be set a minimum of 500mm above the 100-year water level of the creek
- The developer of each lot will need to provide storage for stormwater that allows discharge at pre-developed rates for the 1, 10 and 100 year events
- Existing culverts to be lowered/upgraded to allow free drainage of the surrounding areas
- Basins are recommended at each Lot with overflow to the open drains in the street via culverts (low flow) or rock lined spillway (high flow). Basins should be lined with clay to prevent groundwater recharge
- The road is drained by open drains sized for the 1:10 year event. These will also serve to carry overflow from lot areas
- Open drain outlets to be heavily vegetated with the vegetated areas to be sized at 2% of the connected impervious catchment area.

The Shire and/or WAPC may require the creekline, foreshore and flood fringe to be ceded for drainage purposes at subdivision and/or development stage.

Figure 4.2: Flood Fringe Area



Source: LWMS (Shawmac, 2015)

Industrial Buffers

All development within the Structure Plan area shall have due regard to industrial buffer requirements stipulated by the Environmental Protection Authority and/or Western Australian Planning Commission. Development within the Structure Plan area should only be approved by Council if the Proponent can confirm that buffers can be contained within the bounds of the Structure Plan area and/or within the adjoining WAMMCO site (subject to agreement with WAMMCO). These requirements are supported by the relevant provisions included under the Local Planning Scheme No. 5.

4.4 Open space/natural areas

No open space is proposed within the Structure Plan area.

4.5 Movement networks

Internal Access Road

The Shire of Katanning will progress the gazettal of the existing local road (Henry Street) within the Structure Plan area.

Great Southern Highway

Further consultation with Main Roads WA should occur as part of any subdivision or development application in the Structure Plan area.

Protected pocket turn treatments may be required at the intersection of Great Southern Highway and the Katanning – Dumbleyung Road, depending on projected traffic movements and types of vehicles accessing the site. A Transport Impact Assessment should address this.

Realignment or upgrades to the 4-way intersection with Baker Road & Garstone Road made may be required.

No other access points from Great Southern Highway are proposed, and all lot should be serviced by the internal access roads.

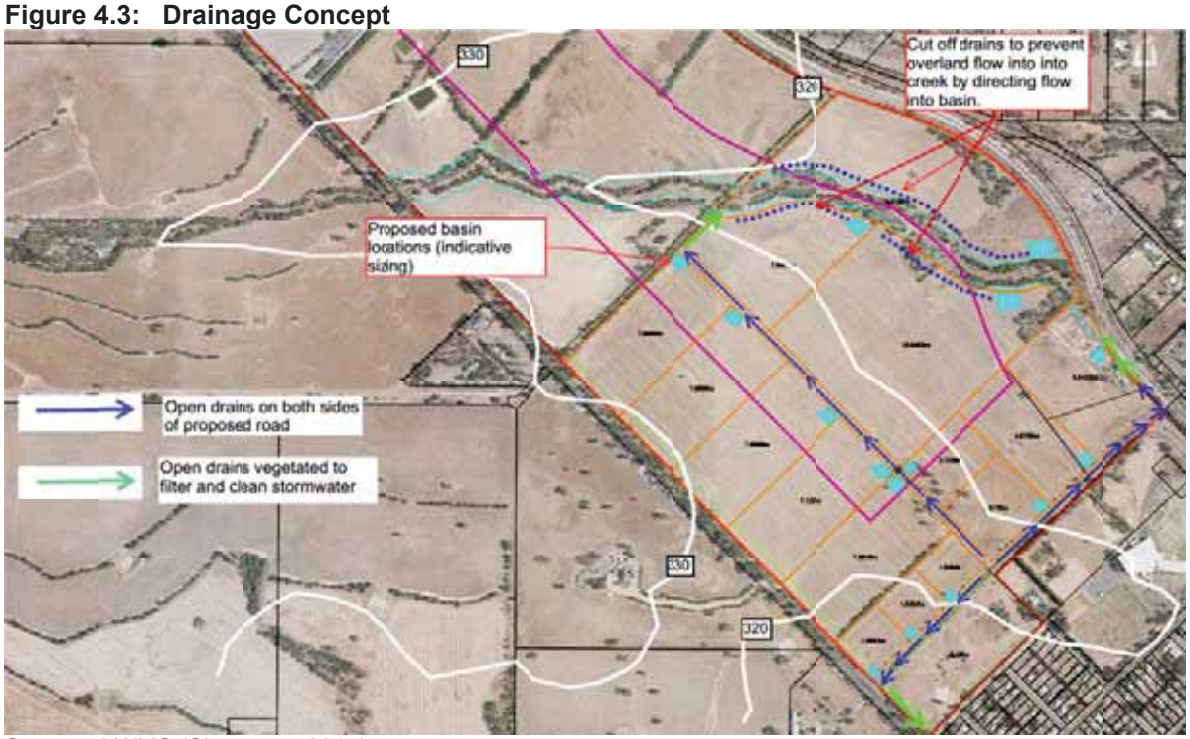
4.6 Water management

The Local Water Management Strategy (Appendix 2) outlines the likely developer requirements and sets out an agreed concept. It has been prepared at a broad conceptual level and will need to be refined when further details on the lot yield, configuration and land use are developed. No direct vehicle access will be permitted from Great Southern Highway. The LWMS provides a comprehensive stormwater, groundwater and water use strategy and has been endorsed by the Department of Water and Environmental Regulation.

A key issue for storm water management in Katanning concluded from the Katanning Flood Assessment (Opus 2013) was the compilation of an estimated Q100 flood level for the SuperTowns development scenario which indicated that the flood fringes predominantly follow the Katanning Creek alignment. Although the majority of the site will not be affected by flooding issues, a non-perennial watercourse with a west east orientation dissects the site and therefore a flood fringe area within the structure plan area has been nominated to exclude development.

The results of the Katanning Flood Assessment (Opus, 2013) showed that Katanning Creek had a 10 year ARI design storm hydraulic design capacity however, the existing piped and overland stormwater system is less than this. This has resulted in localised flooding throughout Katanning. Therefore, a 10 year ARI design storm has been adopted for the proposed development which is typical for business, commercial and industrial areas and intensely developed residential areas. The figure below shows the drainage concept.

Figure 4.3: Drainage Concept



Source: LWMS (Shawmac, 2015)

The LWMS recommends:

- Road reserve drainage will be directed to the Katanning Creek via open drains.
- The developer/owner of each lot will need to provide stormwater storage that allows discharge at the predevelopment flow rate at the 1, 10 and 100-year storm events. This would consist of designing and constructing a basin that discharges into the road drainage network through appropriately sized culverts, perforated pipes and overflow spillways.
- Basins will need to be lined with clay, or similar, to prevent water infiltrating the ground and adding to the groundwater.
- To improve the quality of stormwater the last sections of drains will be heavily vegetated to trap and filter pollutants (suspended solids and trace metals). The same philosophy is to be adopted within each Lot. As well as inside the basin, the drains leading into the basins shall also be vegetated.
- Subdivision to address flood fringe impacts in detailing lot boundaries.
- Development to require minimum floor levels of 500m above the 100year water level of the creek, and to provide storage for storm water that allows discharge at pre-developed rates for the 1, 10 and 100 year events.

The LWMS recommends that each building envelope be graded such that there is no potential for groundwater to perch below building footings, with a 300mm min thickness sand pad above (as detailed in the provisions). The DWMS recommendation to implement infiltration trenches has not been considered for this development area as water logging or high groundwater levels are not an issue for this area. In addition, lowering the groundwater in this area would likely have limited benefit to the town centre which is considerable distance from the subject site. Notwithstanding this, infiltration trenches can be retrofitted into the proposed open drains and within the lots in the future if required.

4.7 Infrastructure coordination, servicing and staging

It is envisaged that the Structure Plan precinct will develop progressively over several years. As such, the Structure Plan promotes flexibility to reduce the need for infrastructure provision. Dedication of Henry Street is required, along with a likely upgrade (comprising sealing, however the Shire has advised that it is unlikely to require widening) of Baker Road. Only one other internal road is proposed, which will be developed as the Structure Plan area progresses.

A sketch plan of possible subdivision is provided in Figure 4.1. The Structure Plan has deliberately avoided inclusion of the subdivision sketch plan to enable a future industrial land user to determine their own requirements and have the flexibility in the Structure Plan to meet their needs at the time.

4.8 Developer contributions

The entire Structure Plan area is owned by the Shire of Katanning. As such, there is no Developer Contribution Plan proposed as part of this Structure Plan. It is envisaged that the Shire will liaise with the ultimate developer of the site regarding the provision of services.

4.9 Implementation/other requirements

The Structure Plan has been adopted by the Shire of Katanning Council in accordance with Schedule 2, Part 4 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. The structure plan was approved by the WAPC in accordance with Clause 22, Part 4, Schedule 2 of the *Planning and Development (Local Planning Scheme) Regulations 2015.*

5 Appendices

Technical Appendices Index

Appendix no.	Document title
1	Structure Planning: Environmental Investigations - Project TE14012, Talis November 2014;
2	Katanning WAMMCO Site Local Water Management Strategy – Version C, Job 1409018, Shawmac Pty Ltd 9 August 2017;
3	Bushfire Hazard Assessment – Project No. 14129, Bushfire Prone Planning July 2014;
4	Servicing and Infrastructure – Doc #: LI-KT-01, Shawmac Pty Ltd September 2014.

APPENDIX 1
Structure Planning: Environmental Investigations –
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Bushfire Hazard Assessment – Project No. 14129, Bushfire Prone Planning July 2014;

APPENDIX 4
Preliminary Service Agreement – Doc #: LI-KT-01, Shawmac Pty Ltd September 2014