

Structure Plan

Portion of Lot 101 (No.777) Teatree Road,
Bindoon

Shire of Chittering

30 April 2021

Version 02



STEWART URBAN PLANNING

This structure plan is prepared under the provisions of the Shire of Chittering Local Planning Scheme No. 6.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON: **11 JUNE 2021**

Signed for and on behalf of the Western Australian Planning Commission



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



Witness

14 JUNE 2021

Date

11 JUNE 2031

Date of Expiry



TABLE OF AMENDMENTS

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



EXECUTIVE SUMMARY

This Structure Plan applies to the north-east portion of Lot 101 (No.777) Teatree Road, Bindoon, being the portion of Lot 101 zoned Special Use under Shire of Chittering Local Planning Scheme No.6.

The Structure Plan land has an area of 50 hectares and is located 7.5 kilometres west-south-west of Bindoon townsite in the Shire of Chittering. The site is approximately 60 kilometres north-north-east of the capital city of Perth, Western Australia.

The purpose of the Structure Plan is to facilitate the development of the land for an integrated tourist resort, consistent with the intent of the Special Use zone that was introduced over the Structure Plan land by Amendment 61 to Local Planning Scheme No.6. The balance of Lot 101 Teatree Road, comprising approximately 425 hectares, was included in the Environmental Conservation Zone pursuant to Amendment 61.

The Structure Plan has been prepared having regard to all relevant town planning and environmental considerations and is supported by technical reports prepared by qualified consultants to ensure the sustainable use and development of the site for its intended purpose.

Summary of Structure Plan

Item	Data
Total area covered by the Structure Plan	50 hectares
Area of each land use proposed:	
• Residential Resort Lots	28.40 hectares
• Tourist Resort and Guest Facilities	03.60 hectares
• Internal Roads	05.00 hectares
• Bushfire Access Roads	01.00 hectares
• Communal Open Space	12.00 hectares
- Wastewater Treatment Facility	00.10 hectares
- Land Application Area	03.40 hectares
- Stormwater Retention Facility	01.00 hectares
- Unencumbered Communal Open Space	07.50 hectares
Estimated number of accommodation units:	
• Residential Resort Lots	46
• Short Stay Villas and Serviced Apartments	68



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TECHNICAL APPENDICES

No.	Title	Type	Referral Agency
1	Certificate of Title and Survey Plan	Document	N/A
2	Engineering Servicing Report	Technical Report	SoC; WC; WP
3	Bushfire Management Plan	Technical Report	SoC; DFES
4	Local Water Management Strategy	Technical Report	DWER; WC; HD
5	Water Supply Advice	Document	DWER; WC; HD
6	Environmental Assessment	Technical Report	EPA; DBCA; DWER
7	Traffic Impact Assessment	Technical Report	SoC

SoC: Shire of Chittering; DBCA: Department of Biodiversity, Conservation and Attractions; EPA: Environmental Protection Authority; DWER: Department of Water and Environmental Regulation; WC: Water Corporation; HD: Health Department; DFES: Department of Fire and Emergency Services; WP: Western Power.



PART 1 IMPLEMENTATION

1. Structure Plan Area

This Structure Plan shall apply to a portion of Lot 101 (No.777) Teatree Road, Bindoon, being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (**Plan 1**).

2. Operation

This Structure Plan shall have effect from the day it is approved by the Western Australian Planning Commission.

3. Staging

The land within the Structure Plan is proposed to be developed in a single stage.

3.1 Staging of Applications

Applications shall be submitted in the following order:

1. Application for subdivision to create freehold parent lot, submitted to the Western Australian Planning Commission.
2. Application for subdivision to create community title / survey-strata lots, submitted to the Western Australian Planning Commission.
3. Application for Development Approval submitted to the Shire of Chittering.

Should development progress without the creation of community title / survey-strata lots, all subdivision / development requirements expressed below (Clauses 4 to 9) are to be satisfied at the development stage.

4. Subdivision

The land within the Structure Plan will be held on one freehold title lot, which may be further subdivided into survey strata lots and common property, consistent with the provisions of Schedule 5 of Local Planning Scheme No.6 ('LPS6'). The Structure Plan may also be the subject of a community title scheme, subject to legislative requirements.

4.1 Scheme By-Laws required as a Condition of Subdivision

Condition 1 to Schedule 5 of LPS6 allows the allocation of not more than 50% of the Residential Resort Lots depicted on the Structure Plan (**Plan 1**) for permanent residential occupation. In addition to those matters specified below at Clause 5.1 (c), scheme by-laws shall be prepared to address the allocation of permanent residential occupation consistent with LPS6. Preparation of the scheme by-laws shall be enforced as a condition of subdivision approval consistent with Part 3 Section 18 of the Strata Titles Act 1985 (as amended).

In the event that development occurs without the creation of separate community title / survey-strata lots, a suitable management plan is to be prepared to address the allocation of any permanent residential occupation in accordance with LPS6.



5. Development Requirements

5.1 Land Use

- (a) The Structure Plan (**Plan 1**) depicts the zones and reserves applicable within the Structure Plan area. The permissibility of land uses within the Structure Plan area shall be in accordance with Item 5 in Schedule 5 of Local Planning Scheme No.6.

Tourist Development Zone

- (b) The Tourist Development Zone depicted on the Structure Plan map shall be used for the purpose of Tourist Development in accordance with the definition of Tourist Development under Local Planning Scheme No.6.

Residential Resort Lots

- (c) Strata scheme by-laws, and / or a management plan prepared to support development, shall be prepared in accordance with Condition 7 to Schedule 5 of LPS6. The by-laws shall be prepared to ensure common management of the Residential Resort Lots and common property depicted on the Structure Plan (**Plan 1**). In addition, the by-laws shall include:

- measures to ensure development is of a consistent built form and maintained as such;
- measures to ensure access to common property by all residents;
- measure to control access and prevent detrimental impacts to the neighbouring conservation lot; and
- any other matters deemed appropriate by the Shire of Chittering to ensure the ongoing sustainability of the tourism land use.

Communal Open Space

- (d) The Structure Plan (**Plan 1**) depicts an area of 12 hectares of Communal Open Space. A Landscape Plan, including detailed design drawings of Communal Open Space areas, and Landscape Management Plan shall be required as a condition of Development Approval or community title / survey-strata Subdivision Approval.

5.2 Public Roads

The portions of unconstructed public road abutting the Structure Plan area (including Brennan Road), along with the unconstructed portion of Teatree Road providing access to and from Great Northern Highway east of the Structure Plan area, are to be constructed to a suitable sealed road standard to the satisfaction of the Shire of Chittering. The requirement to construct the roads shall be required as a condition of community title / survey-strata Subdivision Approval, unless otherwise directed by the Shire of Chittering in consultation with the Western Australian Planning Commission.



6. Infrastructure

6.1 Electricity Supply

- (a) A suitable electricity supply shall be provided at the subdivision stage to create the community title / survey-strata lots. In this regard, a suitable electricity supply may include a renewable 'off-grid' power system, and / or connection to Western Power's reticulated electricity network.

6.2 Water Supply

- (a) A suitable licenced potable water supply and a non-potable water supply shall be provided at the subdivision stage to create the community title / survey-strata lots, and shall be in accordance with the approved Local Water Management Strategy. The provision of a sufficient licenced potable water supply shall be required as a condition of Subdivision Approval.
- (b) A Hydrogeological Assessment shall be undertaken to inform the necessary Urban Water Management Plan. The Hydrogeological Assessment shall support the proposed transfer of existing groundwater allocations to the subject land, pursuant to the Rights in Water and Irrigation Act 1914.

6.3 Wastewater Treatment and Disposal

- (a) An on-site Sewage Disposal System shall be provided in accordance with the requirements of the Government Sewerage Policy.
- (b) The Sewage Disposal System shall include a Land Application Area within the Communal Open Space depicted on the Structure Plan.

*Note: The land application area depicted on the Structure Plan (**Plan 1**) is for illustrative purposes only. If required, following a Site and Soil Evaluation, land application areas may be adjusted. This may result in the rationalisation of the Residential Resort Lots.*

- (c) Details of the Sewage Disposal System shall be provided in accordance with a condition of Development or Subdivision Approval.
- (d) A winter Site and Soil Evaluation is to be provided at the community title / survey-strata subdivision stage, in accordance with 'AS/NZS 1547 On-Site Domestic Wastewater Management', to determine the type of wastewater system to be installed.

6.4 Urban Water Management

An Urban Water Management Plan shall be required as a condition of community title / survey-strata Subdivision Approval. The Urban Water Management Plan shall address the items listed in Section 7 of the Local Water Management Strategy, including:

- Detailed Design of Stormwater Harvesting System;



- Confirmation of Alternate Water Resources;
- Implementation of Water Conservation Strategies;
- Detailed Design of Stormwater Infrastructure; and
- Landscaping.

7. Environmental Management

7.1 Remnant Vegetation

A Landscape Plan identifying areas of remnant vegetation to be retained within the Structure Plan area, including Banksia, Jarrah and Marri trees, shall be required as a condition of community title / survey-strata Subdivision Approval, with subdivisional works to be undertaken consistent with this plan prior to creation of the lots.

7.2 Fauna Management

A Fauna Relocation Management Plan identifying measures to avoid and / or manage adverse impacts on fauna shall be required as a condition of community title / survey-strata Subdivision Approval, with subdivisional works to be undertaken consistent with this plan prior to creation of the lots. The Fauna Relocation Management Plan shall include detail to ensure that mammals and reptiles are relocated to the adjacent conservation areas prior to ground disturbing works.

7.3 Interface with Surrounding Land

Suitable fencing shall be provided to control access to the surrounding Rural and Environmental Conservation zoned land by visitors, residents and domestic animals (if / where permitted). This shall be required as a condition of community title / survey-strata Subdivision Approval.

8. Hazards and Separation Areas

8.1 Wastewater Treatment Facility

A 30 metre buffer shall be provided around the Wastewater Treatment Facility, as depicted on the Structure Plan.

8.2 Bushfire Management

General

- (a) The subdivision and development of the Structure Plan shall be undertaken in accordance with an approved Bushfire Management Plan and Bushfire Emergency Evacuation Plan.
- (b) Where necessary, the Bushfire Management Plan and accompanying Bushfire Emergency Evacuation Plan shall be reviewed and updated to ensure ongoing accuracy and appropriateness as development of the site progresses into the subdivision / development stage.

Residential Resort Lots

- (c) All buildings are to be located within the building envelopes depicted on the Structure Plan (**Plan 1**) and achieve a minimum setback of 17 metres from the boundaries of each Residential Resort Lot.



- (d) An Asset Protection Zone shall be established throughout the entire area of each Residential Resort Lot.

Tourist Development Zone

- (e) All buildings within the Tourist Development Zone shall achieve a minimum setback of 25 metres from the boundaries of the Structure Plan, Communal Open Space and Residential Resort Lots.
- (f) An Asset Protection Zone shall be established throughout the entire area of the Tourist Development Zone.

Vegetation

- (g) All vegetation within the Structure Plan is to be maintained as 'low threat vegetation' as defined in Clause 2.2.3.2 (f) of Australian Standard 3959 – Construction of Buildings in Bushfire Prone Areas.
- (h) All vegetation, including retained trees, shall satisfy the requirements of Schedule 1 – Standards for Asset Protection Zones of the Bushfire Protection Criteria in the Guidelines for Planning in Bushfire Prone Areas.

Bushfire Vehicle Access

- (i) The Public Roads depicted on the Structure Plan shall satisfy the Technical Requirements of Column 1 in Table 6 of the Bushfire Protection Criteria in the Guidelines for Planning in Bushfire Prone Areas.
- (j) The Private Roads depicted on the Structure Plan, including driveways for each Residential Resort Lot, shall satisfy the Technical Requirements of Column 3 in Table 6 of the Bushfire Protection Criteria in the Guidelines for Planning in Bushfire Prone Areas.
- (k) The Emergency Access Ways depicted on the Structure Plan shall satisfy the Technical Requirements of Column 4 in Table 6 of the Bushfire Protection Criteria in the Guidelines for Planning in Bushfire Prone Areas.
- (l) The Perimeter Bushfire Access Road shall be provided as a right-of-way or public access easement in gross to ensure accessibility to the public and fire services during an emergency, unless otherwise agreed with the Shire of Chittering.
- (m) Teatree Road north of the Structure Plan area is to be surveyed and, where necessary, the developer shall be responsible for upgrading the road to a standard which is suitable for allowing two-way access / egress in an emergency. This may include the provision of a bitumen seal to any portion of the road which does not meet the gradient requirements of the WAPC's Guidelines for Planning in bushfire prone areas.



9. Summary of Information Requirements

The following table summarises key information that is required to be prepared and approved at future planning stages:

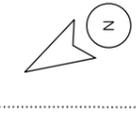
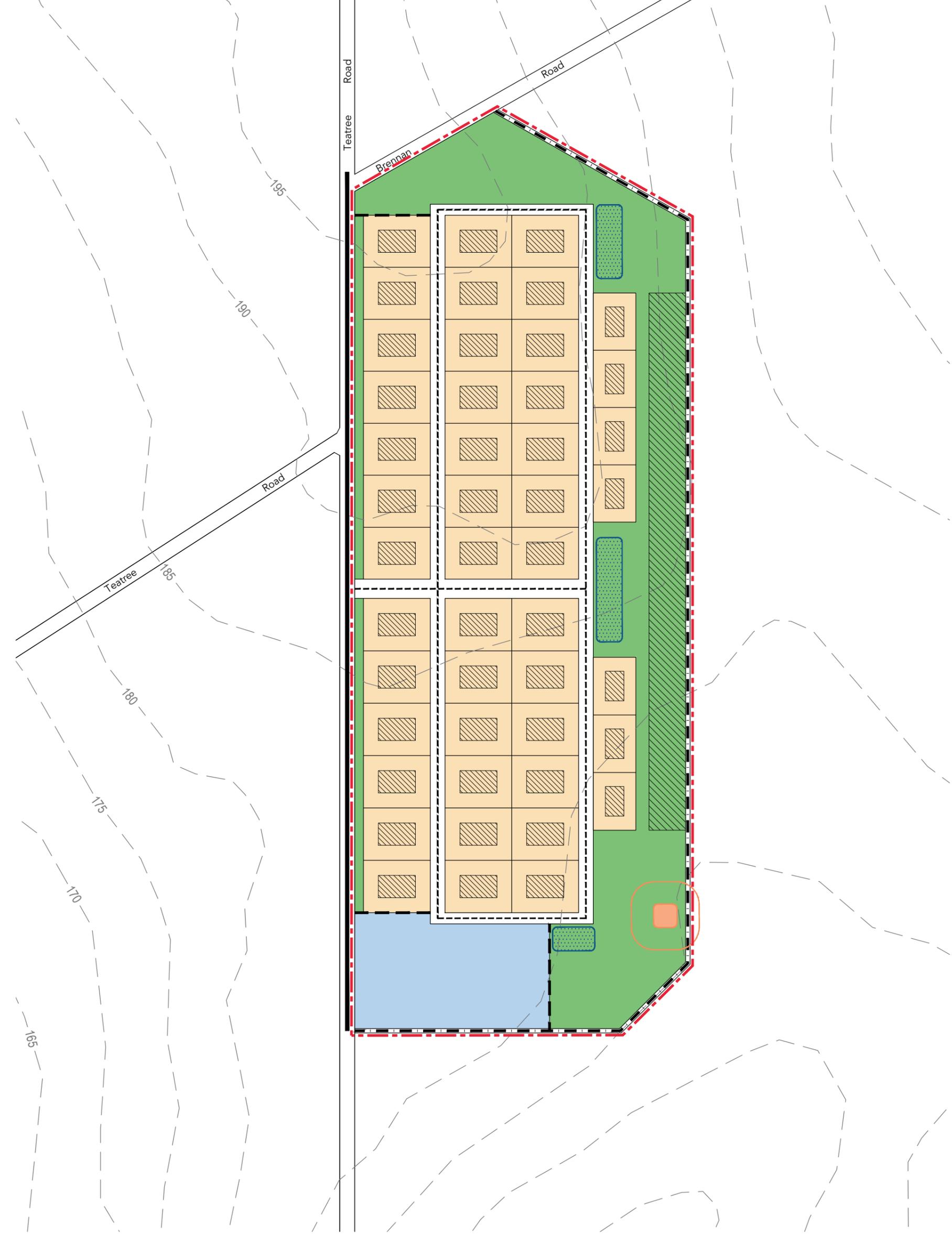
Information	Purpose	Stage	Consultation Required
Strata property by-laws	To address those matters outlined in Local Planning Scheme No.6 for Special Use Zone 5 under Condition 7, while also establishing mechanisms to ensure that not more than 50% of the Residential Resort Lots are used for permanent residential occupation.	Lodged to satisfy a condition of community title / survey strata Subdivision Approval.	Western Australian Planning Commission and Local Government.
Urban Water Management Plan	To progress detailed design of stormwater infrastructure, including harvesting; implement water conservation strategies; confirm alternate water resources in accordance with an 'H2' Hydrogeological Assessment; and guide landscaping outcomes.	Endorsed by the Department of Water and Environmental Regulation and lodged as a condition of community title / survey strata Subdivision Approval.	Department of Water and Environmental Regulation and Local Government.
Site and Soil Evaluation	To determine the type of wastewater system to be used to support the intended development.	Lodged to support community title / survey strata Subdivision Approval.	Department of Health and Local Government.
Landscape and Landscape Management Plan	To detail the final design and ongoing management and maintenance arrangements of landscaping and open space areas; including detail on existing vegetation to be retained, maintaining low-threat bushfire landscaping outcomes, and measures to control the spread of weeds and plant disease such as dieback.	Lodged to satisfy a condition of community title / survey strata Subdivision Approval.	Local Government.
Bushfire Management Plan (Amendment)	To demonstrate compliance with State Planning Policy 3.7: Planning in Bushfire Prone Areas.	Amended and lodged as necessary to support community title / survey strata Subdivision Approval and / or Development Approval.	Department of Fire and Emergency Services and Local Government.
Aboriginal Heritage Survey	Investigations to be undertaken to determine the precise boundaries of Aboriginal Heritage Site No.20008 and whether it extends over the Structure Plan area, and inform any necessary assessments under the <i>Aboriginal Heritage Act 1972</i> .	Prior to the commencement of subdivisional works.	Department of Planning, Lands and Heritage and Local Government.
Teatree Road (east) Upgrade	To maintain vehicular access in all weather conditions, and mitigate future dust nuisance because of increased traffic, consistent with the Traffic Impact Assessment.	Lodged to satisfy a condition of community title / survey strata Subdivision Approval.	Local Government.



Fauna Relocation Management Plan	To avoid and / or manage adverse impacts on existing fauna.	Lodged to satisfy a condition of community title / survey strata Subdivision Approval.	Department of Biodiversity Conservation and Attractions and Local Government.
Emergency Evacuation Plan (Amendment)	To demonstrate compliance with State Planning Policy 3.7: Planning in Bushfire Prone Areas.	Lodged to satisfy a condition of Development Approval.	Department of Fire and Emergency Services and Local Government.
Construction Management Plan	To address those matters outlined in Local Planning Scheme No.6 for Special Use Zone 5 under Condition 9 prior to any development on the land.	Lodged to satisfy a condition of Development Approval.	Department of Biodiversity Conservation and Attractions and Local Government.

Legend:

- Boundary of Structure Plan
- Zones**
 - Tourist Development Zone
 - Residential Resort Lots
 - Communal Open Space
- Roads**
 - Local Road (Public)
 - Internal Road (Private)
 - Emergency Access Way
 - Perimeter Bushfire Access Road (Private)
- Other**
 - Building Envelopes
 - Wastewater Treatment Facility
 - 30m Buffer to Wastewater Treatment Facility
 - Land Application Area for Wastewater Treatment Facility
 - Drainage Retention Areas



Drawing Number: 01
 Revision: A
 Projection: MGA50
 Scale: 1:5,000 @ A3

Project: 0072
 Job Reference: 0072
 Date: 16 December 2019



PART 2 EXPLANATORY REPORT

1.0 Planning Background

1.1 Introduction

This Structure Plan applies to the north-east portion of Lot 101 (No.777) Teatree Road, Bindoon ('Lot 101'), being the portion of Lot 101 zoned Special Use under Shire of Chittering Local Planning Scheme No.6 ('LPS6'). The land the subject of the Structure Plan ('subject land') has an area of 50 hectares.

The purpose of this Structure Plan is to facilitate the subdivision and development of the subject land for a sustainable integrated tourist resort, incorporating residential resort homes, short-stay villas and serviced apartments, communal open space and guest facilities, consistent with the intent of the Special Use zone.

The Structure Plan has been designed having regard to the prevailing site conditions and constraints, the proponent's design requirements for the proposed tourist resort, and the findings of the various technical reports accompanying this Structure Plan.

The proposed tourist resort will rely upon renewable energy whenever possible, utilize low energy materials and appliances, incorporate water sensitive design measures and retain (or utilize) native vegetation where possible.

1.2 Land Description

Location

Lot 101 is situated in the locality of Bindoon, in the Shire of Chittering ('Shire'), approximately 60 kilometres north-north-east of the Perth central area.

Refer **Figure 1 – Regional Location**.

The subject land is located 7.5 kilometres west-south-west of Bindoon townsite, at the south-west corner of Teatree Road and Brennan Road. The intersection of Teatree Road and Great Northern Highway is 7.7 kilometres to the east. The subject land is 2.5 kilometres west of the alignment of the proposed Bindoon Bypass component of the Great Northern Highway: Muchea to Wubin Upgrade (Stage 2).

The eastern boundary of Lot 101 fronts Brennan Road, an unsealed (compact gravel) road terminating as a cul-de-sac 2.5 kilometres south of Teatree Road.

The eastern-most portion of the northern boundary of Lot 101 fronts Teatree Road, a part sealed and part unsealed (compact gravel) road that runs generally in a western direction from Great Northern Highway before turning north at approximately 340 metres west of its intersection with Brennan Road. Teatree Road continues north to Mooliabenee Road, a sealed road running between Great Northern Highway and Brand Highway.



The remaining portion of the northern boundary of Lot 101 (west of Teatree Road) fronts an unconstructed road. This unconstructed road reserve continues generally in a north-west direction for a distance of approximately 6 kilometres where it intersects with Wowra Drive in the Shire of Gingin. The boundary between the Shire's of Chittering and Gingin runs along the western boundary of Lot 101.

Refer **Figure 2 – Local Location**.

Land Use

Lot 101 is completely vegetated, except for fire breaks, and is not used for any known purpose. A review of aerial mapping (Landgate) confirms the site has been vegetated since at least 1981. The land to the north and east is used for rural (farming) purposes. A farmhouse on the property to the north is positioned approximately 200 metres from the northern boundary of the subject land. The land to the south and west of Lot 101 is vegetated and not used for any known purposes.

Refer **Figure 3 – Aerial Photograph**.

Site Cadastral

Lot 101 has a total land area of 474.9985 hectares, with the subject land occupying 50 hectares at the north-east corner of Lot 101. The subject land is generally rectangular in shape, with an approximate depth of 450 metres and maximum length of 1,220 metres. The eastern boundary of the subject land has a frontage of 284 metres to Brennan Road. The eastern-most portion of the subject land's northern boundary has a frontage of approximately 340 metres to Teatree Road, while the remaining portion of the northern boundary has an approximate frontage of 800 metres to the unconstructed road reserve. The southern and western boundaries of the subject land abut the balance portion of Lot 101.

Refer **Figure 4 – Site Plan**.

Legal Description

Lot 101 on Plan 17335 held on Certificate of Title Volume 1869 Folio 841 (refer Appendix 1).

1.3 Planning Framework

State Planning Policies

State Planning Policy 2.0 – Environment and Natural Resources Policy

The Objectives of State Planning Policy 2.0 – Environment and Natural Resources Policy ('SPP2.0') are:

- *to integrate environment and natural resource management with broader land use planning and decision-making;*
- *to protect, conserve and enhance the natural environment; and*
- *to promote and assist in the wise and sustainable use and management of natural resources.*



The relevant Policy Measures of SPP2.0 are summarized in the table below.

Policy Measure	Provisions
General Measures	Avoid development that may result in unacceptable environmental damage and actively seek opportunities for improved environmental outcomes. Support the conservation, protection and management of native remnant vegetation.
Water Resources	Take account of available water resources to ensure maintenance of water quality and quantity. Encourage urban water management through water sensitive design.
Soil and Land Quality	Consider the capability of land to accommodate different land uses. Identify existing and potential areas affected by salinity and acid sulphate soils.
Biodiversity	Consider mechanisms to protect areas of high biodiversity and / or conservation value, including the use of planning controls and conservation covenants. Minimise adverse impacts on areas of high biodiversity or conservation value due to changes in land use or development. Safeguard and enhance ecological linkages.
Landscape	Safeguard landscapes with high ecological value. Incorporate appropriate planning and building design and siting criteria to ensure new development is sensitive to the character and quality of the landscape.
Energy Efficiency	Promote energy efficient building design, including passive solar design, retention of vegetation and the use of alternative (renewable) energy generation.

State Planning Policy 2.9 – Water Resources

The Objectives of State Planning Policy 2.9 – Water Resources (‘SPP2.9’) are to:

1. *Protect, conserve and enhance water resources that are identified as having significant economic, social, cultural and/or environmental values;*
2. *Assist in ensuring the availability of suitable water resources to maintain essential requirements for human and all other biological life with attention to maintaining or improving the quality and quantity of water resources; and*
3. *Promote and assist in the management and sustainable use of water resources*

The relevant Policy Measures of SPP2.9 are summarized in the table below.



Policy Measure	Provisions
General Measures	Protect significant environmental water resources. Prevent or ameliorate adverse impacts on water. Promote improved outcomes such as improved water quality and restoration of natural flow regimes. Identify all water resources above and below ground, including groundwater and surface water catchments. Take into account State Government water resource management strategies, including the provisions of the Rights to Water and Irrigation Act.
Surface and Groundwater Resources	Recognise the hydrological importance of groundwater. Ensure the availability of water resources is compatible with the future requirements of proposed and surrounding land uses, through an assessment of water quality and quantity.
Total Water Cycle Management	Ensure development is consistent with best practices for the sustainable use of water. Incorporate re-use and recycling of water, particularly stormwater and grey water. Consider black water reuse where sewerage is not available. Consider non-potable water sources if fit-for-purpose. Promote retention and use of local native vegetation.

State Planning Policy 3.7 - Planning in Bushfire Prone Areas

State Planning Policy 3.7 – Planning in Bushfire Prone Areas (‘SPP3.7’) applies to land within a Bushfire Prone Area. SPP3.7 and the Guidelines for Planning in Bushfire Prone Areas include Bushfire Protection Criteria setting out Performance Principles and Acceptable Solutions for location, siting and design, vehicle access and water.

The subject land is within a Bushfire Prone Area declared under the Fire and Emergency Services Act, as depicted on the Department of Fire and Emergency Services (‘DFES’) Map of Bush Fire Prone Areas. The Structure Plan will facilitate the development of a tourist resort, which is defined as a Vulnerable Land Use under SPP3.7. The Structure Plan is accompanied by a Bushfire Management Plan (‘BMP’), incorporating a Bushfire Emergency Evacuation Plan (‘BEEP’)

Government Sewerage Policy

The most recent version of the Government Sewerage Policy (‘GSP’) was adopted in September 2019. The Objectives of the GSP are:

1. *to generally require connection of new subdivision and development to reticulated sewerage;*
2. *to protect public health and amenity;*
3. *to protect the environment and the State’s water and land resources;*
4. *to promote the efficient use of infrastructure and land;*
5. *to minimise costs to the broader community including by ensuring an appropriate level and form of sewage servicing is provided; and*
6. *to adopt the precautionary principle to on-site sewage disposal.*



The GSP sets out the circumstances where connection to reticulated sewerage is required. If those circumstances do not apply, the GSP states that on-site sewage disposal may be considered if:

- each lot is capable of accommodating on-site sewage disposal without endangering public health or the environment; and
- the minimum site requirements for on-site sewage disposal can be met.

The GSP stipulates minimum lot sizes for on-site sewage disposal, depending on the location and type of subdivision / development proposal, and requires minimum horizontal and vertical separation distances to be achieved between an on-site sewerage system and water resources. The GSP includes provisions relating to the type of on-site sewage disposal system to be deployed, including the Land Application Area required for the distribution of sewage for further in-soil treatment, absorption or evaporation, and whether a Secondary Treatment System is required. Further details of wastewater treatment are provided below.

Shire of Chittering Local Planning Strategy

The Shire of Chittering Local Planning Strategy (‘Strategy’) was endorsed by the Western Australian Planning Commission on 19 October 2019. The purpose of the Strategy is to provide the rationale for zoning, land use and development controls in a new Local Planning Scheme for the Shire. The Strategy includes Objectives, Strategies and Actions for the following Themes:

- Settlement;
- Infrastructure;
- Natural Resource Management;
- Economy; and
- Planning Precincts.

The most relevant Themes and Actions are summarised in the table below.

Themes and Actions	Response
<p>Infrastructure</p> <p><u>Water Supply and Wastewater Disposal</u></p> <ul style="list-style-type: none"> • Require planning proposals to demonstrate acceptable means of wastewater disposal, stormwater management and drainage, and water supply (including potable and non-potable). • Implement Better Urban Water Management, including the preparation of Urban Water Management Plans (UWMP), for all new non-residential proposals. • Support and encourage land use proposals which seek to implement conservation and efficiency measures to reduce demand on surface and groundwater resources. • Limit expansion of development where land use results in adverse impacts to biodiversity, groundwater and surface water values. 	<p>The Structure Plan is accompanied by reports demonstrating the means of wastewater disposal, stormwater management and water supply, including incorporation of water conservation and efficiency measures.</p> <p>Part 1 of the Structure Plan includes provisions requiring technical details of wastewater disposal, stormwater management and water supply to be provided at the subsequent stages of the planning process.</p>



<p>Natural Resource Management</p> <p><u>Biodiversity Conservation</u></p> <ul style="list-style-type: none"> • Future development is to be located in existing cleared areas to ensure the retention of as much native vegetation as possible. • Proposals to rezone vegetated areas for future development will not be supported, except where identified in the Local Planning Strategy Map. • Structure plans, subdivision and development applications are to address native vegetation retention for biodiversity conservation and amenity, including retention of individual trees at first stages. • Introduce the model 'Environmental Conservation' zone to the Shire's Local Planning Scheme. • Where appropriate, ensure the formal protection of high conservation value areas by zoning for 'Environmental Conservation' and implementing land use control mechanisms such as conservation covenants. • Planning proposals affecting native vegetation are to be accompanied by information from vegetation, flora, fauna and habitat surveys undertaken in accordance with Federal and State policy guidance. • Apply formal mechanisms for the retention and protection of threatened ecological communities and/or threatened species habitat in planning and decision making. • Habitat retention and protection requirements are to be determined at rezoning, or at the next stage of planning if land is already zoned for development. 	<p>LPS6 Amendment 61 rezoned Lot 101 Teatree Road by including 425 hectares in the Environmental Conservation zone and 50 hectares in the Special Use zone, consistent with Figure 1 of the Strategy.</p> <p>90% of Lot 101 has therefore been set aside for conservation purposes. Development of the balance 10% of Lot 101 in accordance with this Structure Plan is consistent with the Strategy.</p> <p>Further details of Amendment 61 are provided below.</p>
<p><u>Bushfire Risk Management</u></p> <ul style="list-style-type: none"> • Planning proposals are to be accompanied by appropriate information addressing bushfire hazard and mitigation measures in accordance with State Policy. • Planning proposals are to improve access and egress outcomes, as highlighted on the Bushfire Risk Management Map and on advice from the Shire and the State department responsible for fire response and emergency services. 	<p>The Structure Plan is accompanied by a Bushfire Management Plan and Bushfire Emergency Evacuation Plan. Part 1 of the Structure Plan includes provisions relating to bushfire management.</p>
<p>Economy</p> <p><u>Tourism and Recreation</u></p> <ul style="list-style-type: none"> • Amend the Local Planning Scheme to support tourist developments that are compatible with the landscape setting and take account of bushfire risks, servicing and environmental conditions. 	<p>LPS6 Amendment 61 included the subject land in the Special Use zone and introduced provisions to facilitate an integrated tourist development in accordance with this Structure Plan.</p>
<p>Bindoon Planning Precinct</p> <ul style="list-style-type: none"> • Encourage tourism and related developments in the Bindoon Townsite zone and adjacent areas 	<p>LPS6 Amendment 61, together with this Structure Plan, allow for an integrated tourism development in close proximity to Bindoon.</p>

Refer **Figure 5 – Extract from Local Planning Strategy.**



Local Planning Scheme No.6

LPS6 sets out the way land is to be used and developed, classifies areas for land use, and includes provisions to coordinate infrastructure and development within the Shire of Chittering.

Amendment 61 to LPS6 provides for the following development on Lot 101:

- The 50-hectare portion of land at the north-east corner of Lot 101 is zoned 'Special Use' under LPS6; and
- The balance portion of Lot 101, comprising approximately 425 hectares, is zoned 'Environmental Conservation'.

Specific provisions are provided under Schedule 5 of LPS6 to control development outcomes on the 50-hectare portion of Lot 101. These provisions necessitate the preparation and approval of this Structure Plan. Development on the balance 'Environmental Conservation' zoned portion are specified by Schedule 13 of LPS6.

Refer **Figure 6 – LPS6 Zoning Map**



2.0 Site Conditions and Constraints

2.1 Biodiversity and Vegetation

The Biodiversity Conservation Act 2016 provides a statutory basis for the listing of threatened native plants, threatened native animals and threatened ecological communities. Lot 101, including the subject land, contains intact native vegetation that has not previously been cleared.

For this reason, PGV Environmental were engaged to undertake an Environmental Assessment, including a detailed Flora, Vegetation and Fauna Survey ('Survey'). The Survey finds that vegetation on the subject land is *"considered to be in Pristine condition due to the lack of disturbance and very low coverage of weed species."*

Flora

The Survey identified a total of 123 plant species, with no 'Threatened (Declared Rare)' species recorded on the subject land. One 'Priority Three' species was recorded in very low numbers at one location in the central southern portion of the subject land. The Survey concludes that *"the low number of plants on the site is not likely to be considered an important population."*

Vegetation

Two vegetation complexes were identified on the site:

- Mogumber Complex-South: open woodland of Marri, Jarrah and Banksia; and
- Karamal Complex-South: open forest of Marri, Jarrah, Banksia.

The Survey notes that the percentage remaining of these vegetation complexes in the wider region exceeds 40% and 50% respectively, and states:

The percentage protection is above the 30% minimum criteria for vegetation complexes in the Perth and Peel Region Constrained Areas for retention of vegetation complexes State-wide as outlined in the EPA Position Statement No. 2 Environmental Protection of Native Vegetation in Western Australia.

The vegetation complexes mapped on the site are not considered endangered or regionally significant. Any clearing that might occur on the site in the future would not reduce the extent remaining to below 30%.

Within these two vegetation complexes, the Survey recorded a total of six vegetation types. Figure 3 of the Survey maps the location of the six vegetation types over the subject land.

Banksia Woodlands

The vegetation type 'BmBaEt' running through the eastern portion of the subject land contains a Threatened and Priority Ecological Community, described in the Survey as follows:

The vegetation type BmBaEt contains Banksia attenuata and B. menziesii and is in Pristine condition and is therefore considered part of the Banksia Woodlands of the



Swan Coastal Plain Threatened Ecological Community (TEC) as listed under the Commonwealth EPBC Act. The site contains around 9ha of the BmBaEt vegetation type.

The Banksia Woodland of the Swan Coastal Plain are listed at the State level as a Priority 3 Ecological Community. The BmBaEt vegetation type on the site is also identified more specifically as the 'Banksia Woodland of the Gingin area restricted to soils dominated by yellow to orange sands' which is a Priority 2 Ecological Community.

Fauna

The Survey finds that the fauna habitat on the site is Open Woodland which, due to its Pristine condition and linkages with surrounding bushland, is considered to be High Quality Fauna Habitat. The Open Woodland Habitat contains foraging habitat suitable for the endangered Carnaby's Black Cockatoo, but is not considered suitable habitat for roosting or breeding. The foraging habitat includes the vegetation types containing jarrah, marri and banksia trees, comprising approximately 28 hectares of the subject land. The subject land also contains habitat for the south-western brush-tailed Phascogale, Southern Brown Bandicoot, and the Rainbow Bee-eater. These matters necessitate the need for the preparation of a Fauna Relocation Management Plan.

Environmentally Sensitive Areas

As the subject land contains a Threatened Ecological Community (Banksia Woodlands), it is deemed to be within an Environmentally Sensitive Area declared under Part 5 of the Environmental Protection Act ('EP Act'). Accordingly, an exemption to clear native vegetation pursuant to the Environmental Protection (Clearing of Native Vegetation) Regulations does not apply, meaning a permit to clear is required under Part 5 of the EP Act. Further, an exemption under Schedule 6 of the EP Act is not available as the clearing of vegetation has not previously been assessed under Part 4 of the EP Act. Approval to clear will also be required under the Commonwealth Environmental Protection and Biodiversity Conservation Act.

Approach

The vegetation on the subject land is representative of the vegetation found across the entire area of Lot 101, which has a land area of 475 hectares. LPS6 Amendment 61 included the majority area of Lot 101, comprising 425 hectares or 90% of the total lot area, in the Environmental Conservation zone, where a Conservation Covenant and other measures will be implemented to facilitate retention of Banksia Woodland. This offsets the clearing of vegetation on the remaining 50 hectare (10%) portion of Lot 101, which has been included in the Special Use zone under LPS6 to facilitate the proposed tourist development in accordance with this Structure Plan.



2.2 Landform and Soils

Topography

The subject land rises gently from west to east, from a natural ground level of 175 metres AHD at its western boundary to a natural ground level of 196 metres AHD near the corner of Teatree Road and Brennan Road.

Soils

The soils of the subject land are described in Section 2.3 of the accompanying Flora, Vegetation and Fauna Survey prepared by PGV Environmental, as follows:

The site is on the Mogumber System which are located on gently undulating plateau made up of colluvium from weathered sandstone. The unit is made up of gentle to moderate sloping sandplain, varying from pale to yellow clayey sand with gravel and laterised ridges (DPIRD, 2019).

The soils mapped on the site are:

- *Mogumber 1 Subsystem (222Mb_1) which are undulating broad crests and very gentle upper slopes (<10%) with common lateritic duricrust outcrop and shallow gravelly sands;*
- *Mogumber 3 Subsystem (222Mb_3) which are gently inclined undulating slopes and minor drainage head-waters consisting of deep grey siliceous or bleached sand; and*
- *Mogumber 4 Subsystem (222Mb_4) which are gently to moderately inclined slopes (<10%) with shallow gravelly sands and few areas of lateritic outcrop (DPIRD, 2019).*

The site is not within an area where there is a risk of Acid Sulphate Soils occurring.

2.3 Water

Groundwater

The subject land is elevated and well above the groundwater in the locality, with the surficial aquifer estimated to be 52 metres below the site's natural ground level. The Structure Plan is supported by a Local Water Management Strategy ('LWMS'), which provides a further description of groundwater conditions in the locality.

Surface Water Resources

There are no surface water courses or wetlands on or within close proximity to the subject land. The Brockman River is located 7 kilometres to the east. The western extent of the Brockman River Catchment is 300 metres to the east of the subject land on the opposite side of a ridge that exceeds an elevation of 200 metres AHD. Bindoon Brook is 1.3 kilometres to the north and flows in a western direction,

Stormwater

The subject land is not within an area provided with a comprehensive piped drainage system. Stormwater will be retained and disposed on-site in accordance with the principles of Water Sensitive Urban Design, as described in the attached LWMS.



Water Supply

Preliminary water modelling suggests the proposed tourist resort will require up to 300,000 kilolitres of water per annum, comprising 200,000 kilolitres of potable water and 100,000 litres of non-potable water. The subject land is outside the Water Corporation's Bindoon Water Supply service area, meaning potable water will be sourced from a combination of options.

Discussions with the Water Corporation and independent water service provider, Aqua Ferre (Muccha) Pty Ltd, indicate that an excess water allocation is available to meet anticipated demand. It is estimated up to 70,000 kilolitres per annum of treated water will potentially be available from the Water Corporation, with the supply of approximately 150,000 kilolitres per annum provided by Aqua Ferre (Muccha) Pty Ltd.

The supply of water from the Water Corporation and Aqua Ferre (Muccha) Pty Ltd will be complimented by rainwater harvesting and water recycling, including the use of treated wastewater for irrigation and other non-potable purposes. It is estimated up to 80,000 kilolitres per annum will be supplied from water harvesting and recycling initiatives within the proposed development.

Wastewater

The subject land is not located in an area that has access to reticulated sewerage and none of the provisions in Section 5.1.1 of the GSP apply. Therefore, in accordance with Section 5.2 of the GSP, on-site sewage disposal may be considered, provided there is no detrimental impact on public health or the environment, and the minimum site requirements outlined in the GSP can be met. In this regard, pursuant to Sections 5.2.1 to 5.2.4 of the GSP:

- the subject land is not within a Sewage Sensitive Area, being outside the extent of the Brockman River Catchment;
- the proposed development is considered to fall within the land use category of *"survey strata lot or strata lots for an approved grouped dwelling, commercial or industrial development (outside public drinking water source areas"*, with minimum lot sizes to be determined on a case-by case basis;
- the subject land exceeds the minimum separation distances required from surface water resources; and
- the subject land exceeds the minimum separation distances required from groundwater.

2.4 Bushfire Hazard

The Structure Plan is supported by a BMP prepared in accordance with SPP3.7. The BMP incorporates the following:

- Bushfire Attack Level ('BAL') Assessment;
- Bushfire Protection Criteria Assessment; and
- Bushfire Emergency Evacuation Plan.



Bushfire Attack Level Assessment

The BAL Assessment demonstrates that habitable structures within the Structure Plan are capable of achieving a bushfire attack level rating of BAL-29 or lower, subject to:

- All vegetation classified as Low-Threat Vegetation in accordance with Clause 2.2.3.2 of Australian Standard AS3959 – Construction of Buildings in Bushfire Prone Areas ('AS3959');
- Provision of an Asset Protection Zone around all buildings; and
- Buildings being setback from boundaries in accordance with the provisions contained in Part 1 of this Structure Plan.

All habitable buildings within the Structure Plan will be constructed in accordance with the provisions of AS3959 with respect to BAL-29 or lower.

Bushfire Protection Criteria Assessment

The BMP demonstrates that development within the area of the Structure Plan is capable of satisfying the Acceptable Solutions of the Bushfire Protection Criteria in the SPP3.7 Guidelines for Planning in Bushfire Prone Areas.

Bushfire Emergency Evacuation Plan

The Structure Plan will facilitate the development of tourist accommodation, which is defined as a Vulnerable Land Use within a declared Bushfire Prone Area. The BMP includes a BEEP setting out responsibilities and procedures in the event of a bushfire.

2.5 Heritage

Aboriginal Heritage

A search of the Department of Aboriginal Affairs 'Register of Aboriginal Heritage Sites' indicates that part of the subject land is within Aboriginal Heritage Site No.20008 – Gingin Brook Waggy Site. This is a large site extending across Bindoon and Gingin, and north toward Moora, with the site being significant for the following reasons: historical, mythological, camp, hunting place, plant resource, water source.

In accordance with the Aboriginal Heritage Act, it is an offence to damage or disturb a site of Aboriginal Heritage Significance without consent under the AH Act. Prior to any ground disturbing activities taking place within the subject land, investigations will be undertaken to determine the precise boundaries of Aboriginal Heritage Site No.20008 and whether it extends over the Structure Plan. If required, an Aboriginal heritage assessment will be undertaken and consents obtained under the AH Act.

European Heritage

A search of the State Heritage Office 'Register of Heritage Places' confirms the site does not contain or form part of any place listed on the State Register of Heritage Places under the Heritage Act. The site does not contain any place included in the City's Municipal Inventory or Heritage List.



2.6 Traffic

The subject land is not located in close proximity to any major transport infrastructure and as such future development is unlikely to be exposed to traffic noise.

2.7 Other Services

The availability of other services, including gas, power and communications, are discussed in the attached Civil Engineering Report, which concludes the integrated tourist development proposed within the Structure Plan area is capable of being provided with all essential services.

2.8 Summary

As summarised in the table below, the site conditions and constraints do not prevent the subject land from being developed for its intended purpose in accordance with the provisions of this Structure Plan.

Constraint	Response
Biodiversity and Conservation	90% of Lot 101 has been zoned Environmental Conservation with the remaining 10% zoned Special Use to facilitate the proposed tourist development in accordance with the provisions of this Structure Plan.
Landform and Soils	The topography and soils of the subject land do not present any constraints to development.
Water	The site is elevated at least 50 metres above the groundwater level. There are no surface water features on the site. Stormwater will be managed on-site in accordance with the principles of Water Sensitive Urban Design. The subject land is outside the Water Corporation's Bindoon Water Supply service area.
Wastewater	The subject land is not located in an area that has access to reticulated sewerage. On-site treatment and disposal of sewage in accordance with the Government Sewerage Policy will be required.
Bushfire	The subject land is within a declared Bushfire Prone Area. The Bushfire Management Plan demonstrates the Structure Plan is capable of being developed in accordance with SPP3.7.
Heritage	The site is within a registered Aboriginal Heritage Site. Prior to any ground disturbing activities, further investigations will be required to determine whether formal consents under the Aboriginal Heritage Act are required. The site does not have any Local or State heritage significance.
Traffic	The subject land is not located in close proximity to any major transport infrastructure
Other Services	The proposed development is capable of being serviced with gas, power and communications.



3.0 Structure Plan

3.1 Land Use

This Structure Plan has been prepared to facilitate the subdivision and development of the site for an integrated tourist development, consisting of 46 Residential Resort Lots and approximately 68 short-stay villas / serviced apartments in the Tourist Development zone.

Tourist Development Zone

The Tourist Development zone is positioned toward the north-west corner of the site and will comprise a main resort building and stand-alone villas set within landscaped grounds. Guest facilities will include a swimming pool, gymnasium, spa, lobby bar, restaurant and reception centre.

Residential Resort Lots

The majority of the site will be occupied by the 46 Residential Resort Lots, which will be used for permanent residential and short-term accommodation in accordance with the provisions of Schedule 5 of LPS6. The majority of Residential Resort Lots have an area of 0.62 hectares, while the seven Residential Resort Lots with direct frontage to the Communal Open Space have an area of 0.51 hectares. The Structure Plan depicts a Building Envelope on each Residential Resort Lot, within which all buildings are required to be located. Land outside the Building Envelopes will be used for landscaping, pedestrian paths and a vehicle access driveway to each residence. The Building Envelopes have a size of 1,500m² for the Residential Resort Lots of 0.62 hectares and 1,000m² for the Residential Resort Lots of 0.51 hectares.

3.2 Road Layout and Access

The Structure Plan proposes an internal road layout that maximises connectivity within the site whilst providing numerous exit points to the public road network.

Public Road Access

The Structure Plan abuts Teatree Road: an existing trafficable and partially sealed road running between Great Northern Highway and Mooliabeenee Road. Access to the tourist resort will be from an existing unconstructed road on the north-east boundary of the Structure Plan that forms an extension of Teatree Road. The portion of this unconstructed road abutting the Structure Plan, together with the portion of Teatree Road abutting the site, will be constructed to a trafficable standard in accordance with the specifications of the Shire.

Tourist Development Zone

Access to the main resort building will be obtained from a new driveway off the road reserve abutting the north-east boundary of the subject land. The resort driveway is approximately 700 metres to the north-west of Teatree Road.

Residential Resort Lots

Access to each of the Residential Resort Lots is proposed from an internal 'loop' road that connects to the existing road reserve on the north-east boundary of the subject



land at a distance of 200 metres from the intersection with Teatree Road. The central 'spine' of the internal road has a width of 25 metres and will function as the main entry to the Residential Resort Lots. All Residential Resort Lots will have frontage to the two linear sections of the internal road, which have a width of 20 metres. A width of 15 metres is proposed for the short connecting internal roads at each end of the Residential Resort Lots.

Bushfire Access Roads

A Perimeter Bushfire Access Road will run around the boundary of the Structure Plan where it abuts the balance portion of Lot 101, between the existing road reserve at the northern corner of the site to Brennan Road on the site's south-east boundary. The Perimeter Bushfire Access Road will be constructed in accordance with the technical requirements of the Guidelines for Planning in Bushfire Prone Areas, as applicable to a public road.

In addition to the Perimeter Bushfire Access Road, three Emergency Access Ways ('EAW') are proposed. Two of the EAW's connect the internal 'loop' road servicing the Residential Resort Lots to the public road abutting the north-east boundary of the Structure Plan. The other EAW runs along the south-west boundary of the Tourist Development Zone and connects the internal 'loop' road to the public road via the Perimeter Bushfire Access Road. The EAW's will be constructed in accordance with the technical requirements of the Guidelines for Planning in Bushfire Prone Areas.

Development of the integrated Tourist Development requires that two access routes are provided, both of which allow for safe access and egress to two different destinations and are available to all residents and the public at all times and under all weather conditions. It has been identified that portions of Teatree Road (north) may not meet the acceptable solutions for two-way access, on the basis that sections of the road do not meet the maximum grade of 1 in 10 over total distances of less than 50 metres. Accordingly, a performance principle approach is likely necessary to ensure that the road is constructed to support vehicular access and egress and allow emergency and other vehicles to move along it easily and safely at all times. This approach is likely to involve a hard pavement (bitumen) being applied by the developer to those sections of Teatree Road which do not meet the maximum grade requirements.

3.3 Communal Open Space

Communal Open Space will be established around the perimeter of the resort and used for a range of passive and active purposes, such as walk trails and potentially a short 9-hole golf course. The Communal Open Space occupies 12 hectares, representing 24% of the Structure Plan, with an unencumbered area of 7.5 hectares, being equivalent to 15% of the Structure Plan. This is depicted in the table below.



Communal Open Space Schedule	Area
Total Area	12 hectares
Deductions	
• Wastewater Treatment Facility	00.10 hectares
• Land Application Area	03.40 hectares
• Stormwater Retention Facility	01.00 hectares
Total Deductions	4.50 hectares
Unencumbered Communal Open Space	07.50 hectares

A 10-metre wide strip of Communal Open Space runs between the Residential Resort Lots and the public road on the site’s north-east boundary, to provide a natural entry statement to the resort. The main area of Communal Open Space is adjacent to the balance portion of Lot 101 and ranges in width from approximately 70 metres to 180 metres. Communal Open Space in this area will contain drainage retention facilities (landscaped swales) and the wastewater treatment facility, which will be integrated into the landscape.

The majority of the Communal Open Space will be parkland cleared and maintained as ‘low threat vegetation’ in accordance with the recommendations of the Bushfire Management Plan. This will allow for native vegetation, including Banksia, Jarrah and Marri trees, to be retained in select areas under a managed landscape regime, in accordance with the requirements of AS3959 and the Standards for Asset Protection Zones under the Guidelines for Planning in Bushfire Prone Areas. This requires trees (retained and new) to be spaced 6 metres apart with clearance between canopies, with low fuel species vegetation at ground level. Waterwise landscaping with efficient irrigation will be deployed throughout the Structure Plan.

The landscape regime for the resort will aim to achieve a balance between retention of the site’s natural setting and the need to establish a safe environment for people in the event of a bushfire. A Landscape Plan will be submitted at the Development Application stage, with the final design subject to engineering, bushfire and drainage requirements.

3.4 Services and Infrastructure

Earthworks

The site is relatively flat and minimal earthworks are required. As stated in the Engineering Servicing Report:

Bulk earthworks over the site aren’t expected to be required because of the nature of the development, soil conditions, vegetation coverage and separation to groundwater. Detailed earthworks will be required to set road levels and building pads for the works. Along with this, detailed earthworks will be used to set landscaping features through the communal open space.

Details of earthworks, levels and retaining walls (if any) will be provided at the Development Application stage of the proposed development.



Stormwater

The Engineering Servicing Report describes the proposed stormwater management regime for the resort as follows:

It is anticipated that all stormwater will be retained and disposed of onsite through an integrated approach of infiltration through landscaped areas, in line with the principles of Water Sensitive Urban Design, as well as harvesting from roof drainage for rainwater tanks for potable and irrigation use.

Where treatment areas are required for stormwater runoff, they will be placed in the 12 hectares allocated for communal open space.

Water recycling will be an important part of the management of the site and is further discussed in the Local Water Management Strategy prepared by 360 Environmental Pty Ltd.

Further geotechnical reporting will be required to confirm the suitability and permeability of detailed areas on site for disposal, however regional mapping as well as site inspection suggests this will be possible. The structure plan mapping shows there will be the ability to provide appropriate separation from the proposed wastewater treatment facility that will be required for the site.

Preliminary sizing for road runoff and building runoff for a 1% annual exceedance probability suggests a 0.8 hectare area 300 mm deep would be required to treat stormwater to predevelopment levels if not harvested for reuse.

The design of the stormwater management system will be in accordance with urban water best practice. Roof run-off from the Residential Resort Lots will be directed to individual rainwater tanks or underground storage tanks for non-potable use, such as irrigation. Internal road reserves will incorporate swales for infiltration at source for the 20% to 1% annual exceedance probability. For rainfall events exceeding 1%, stormwater will flow to infiltration basins within the Communal Open Space.

The Communal Open Space depicted on the Structure Plan is of sufficient size to accommodate on-site stormwater retention facilities of up to 1 hectare to cater for anticipated stormwater (excluding water harvested for re-use), with sufficient separation from the required on-site wastewater treatment facility.

Water Supply

The subject land is outside the Water Corporation's Bindoon Water Supply service area, requiring water to be sourced from a combination of options.

Water Corporation

It is estimated up to 70,000 kilolitres per annum of treated water will potentially be available from the Water Corporation, requiring infrastructure to be extended from the existing Water Corporation supply point situated 2 kilometres to the north-east.



Aqua Ferre (Muchea) Pty Ltd

Discussions have been held with an independent water service provider, Aqua Ferre (Muchea) Pty Ltd, to transfer approximately 150,000 kilolitres of water per annum from their existing groundwater allocation to service the proposed tourist development. In-principle agreement has been reached with Aqua Ferre (Muchea) Pty Ltd and a formal agreement is being prepared to give effect to the proposed transfer of the required groundwater. This will likely require installation of a bore and small treatment facility, to be located within the Communal Open Space depicted on the Structure Plan. Further groundwater investigations and approvals pursuant to the Rights in Water and Irrigation Act will be required.

Water Harvesting and Recycling

The supply of potable water from the Water Corporation and Aqua Ferre (Muchea) Pty Ltd will be complemented by rainwater harvesting and water recycling, including installation of rainwater tanks within the Residential Resort Lots and use of treated wastewater for irrigation and other non-potable purposes, as outlined in the attached LWMS. It is estimated up to 80,000 kilolitres per annum will be supplied from water harvesting and recycling initiatives within the proposed development.

Wastewater

An on-site wastewater treatment facility is proposed near the site's western boundary within the area of Communal Open Space. The wastewater treatment facility will incorporate a 30-metre buffer and allow for primary treatment and, if required, secondary treatment prior to disposal on-site. In accordance with the Engineering Servicing Report, a Land Application Area of almost 3.4 hectares is required for dispersion of treated wastewater.

The Communal Open Space is sufficient to accommodate the required 3.4 hectare Land Application Area. As depicted on the Structure Plan, it is proposed to locate the Land Application Area adjacent to the south-west boundary of the Structure Plan. The precise boundary and extent of the Land Application Area will be determined once the detailed design of the Communal Open Space is finalised, to maximise opportunities to utilise treated water for irrigation of landscaped areas.

Energy

A substation will be installed within the Tourist Development Zone of the Structure Plan to supply power from existing Western Power infrastructure located to the east of the subject land. Renewable energy is proposed to be integrated into the resort to reduce reliance on supplied energy and off-set network connection headworks charges. It is anticipated that solar photovoltaic cells will be installed to off-set daytime energy use and provide a source of power for a range of facilities, such as water heating, bores and pumps, and lighting within the resort grounds.



3.5 Water Conservation and Management

A range of water conservation and management initiatives are proposed to be deployed throughout the proposed development, including:

- Waterwise landscaping, including retention of native trees where possible, and planting of species that do not rely upon irrigation post-establishment;
- Use of high quality, water efficient irrigation systems;
- Use of groundwater for non-potable purposes;
- Installation of water efficient fixtures and fittings throughout the development;
- Installation of rainwater tanks to collect runoff from the Residential Resort Lots, together with installation of grey water re-use systems for garden irrigation;
- Educational material and signage throughout the resort to inform guests and visitors of the need to conserve water;

An Urban Water Management Plan ('UWMP') will be prepared at the Development Application stage to demonstrate the water conservation and management strategies to be implemented throughout the resort. As recommended in the LWMS, the Urban Water Management Plan will:

- Provide detailed engineering designs of proposed water supply, wastewater treatment and stormwater drainage systems;
- Confirm the alternate water resources and demonstrate appropriate approvals have been obtained;
- Outline water treatment requirements for non-potable water harvested from roof runoff, wastewater and grey water reuse; and
- Confirm the monitoring, maintenance and funding arrangements to manage all alternate water resources and the on-site wastewater management system.



4.0 Conclusion

This Structure Plan applies to the 50 hectare north-east portion of Lot 101 (No.777) Teatree Road, Bindoon, being the portion of Lot 101 zoned Special Use under Shire of Chittering Local Planning Scheme No.6. The purpose of the Structure Plan is to facilitate the development of an integrated tourist resort on the subject land, consistent with the intent of the Special Use zone.

The Structure Plan has been prepared having regard to all relevant town planning and environmental considerations and is supported by technical reports prepared by qualified consultants to ensure the sustainable use and development of the site for its intended purpose.

This will be achieved through the provisions contained in Part 1 of the Structure Plan, which require the following matters to be addressed at the subdivision and / or development stages of the approval process:

- Management of the Residential Resort Lots;
- Detailed design of the Communal Open Space;
- Upgrades to the public road abutting the site's north-east boundary;
- Provision of a Hydrogeological Assessment for groundwater extraction;
- Provision of a Site and Soil Evaluation for the Wastewater Treatment System;
- Submission of an Urban Water Management Plan;
- Submission of a Landscape Plan; and
- Implementation of an approved Bushfire Management Plan.

Consistent with the intent of Amendment 61 to Local Planning Scheme No.6, the provisions of this Structure Plan will facilitate the development of an integrated tourist resort over 10% (50 hectares) of Lot 101. The remaining 90% (425 hectares) of Lot 101 is included in the Environmental Conservation zone under Local Planning Scheme No.6, where a Conservation Covenant and other measures are proposed to facilitate retention of Banksia Woodland.

This outcome represents an appropriate balance between environmental conservation and strategic tourism development, and is consistent with the provisions of the Shire of Chittering's endorsed Local Planning Strategy.



FIGURES



TECHNICAL APPENDICES



Appendix 1
Certificate of Title and Survey Plan



Appendix 2
Engineering Servicing Report



Appendix 3
Bushfire Management Plan



Appendix 4
Local Water Management Strategy



Appendix 5
Water Supply Advice



Appendix 6

Environmental Assessment

Including Flora, Vegetation and Fauna Survey