Development Services Attachments
Wednesday, 28 October 2015

REPORT NUMBER	REPORT TITLE AND ATTACHMENT DESCRIPTION	PAGE NUMBER(S)
9.1.4	**Section 31 SAT Order – Proposed dwelling at Lot 125 Turtledove Drive, Lower Chittering** 1. Council Minutes 15 July 2015	1
9.1.5	**Reconsideration of Scheme Amendment No. 54 – Rezoning of Lot 300 Settlement Road, Bindoon*** 1. Scheme Amendment documents dated Nov 2014 2. Request letter and revised draft Structure Plan	9
9.1.6	**Policy Review - Local Planning Policy 7 Outbuildings** 1. Proposed Local Planning Policy 7 Outbuildings 2. Existing Local Planning Policy 7 Outbuildings and Swimming Pools	95
9.1.7	**Proposed Transport Depot – Lot 7 Great Northern Highway, Muchea** 1. Locality Plan 2. Staged site Plan 3. Application report with plans 4. Schedule of Submissions 5. Catchment Management Plan 6. Consultation Plan	109

8. ANNOUNCEMENT FROM THE PRESIDING MEMBER

Nil

9. REPORTS

9.1 DEVELOPMENT SERVICES

At the Ordinary meeting of Council held 17 June 2015, Council resolved to lay item *'9.1.6 Retrospective Planning Approval for Conversion of Shed to Dwelling, Lot 125 Turtledove Drive, Lower Chittering'* on the table for one month, to give the Proponent the opportunity to comply with the requirements associated with the conversion of the outbuilding (P118/11) to a Dwelling (P267/14).

9.1 PROCEDURAL MOTION
Moved Cr Gibson/ Seconded Cr Mackie
That item *'9.1.1 Retrospective Planning Approval for Conversion of Shed to Dwelling, Lot 125 Turtledove Drive, Lower Chittering'* be raised from the table.

THE MOTION WAS PUT AND DECLARED CARRIED 7/0

9.1.1 Retrospective Planning Approval for Conversion of Shed to Dwelling – Lot 125 Turtledove Drive, Lower Chittering*

Report date	17 June 2015, amended 30 June 2015
Applicant	J & S Ortin
File ref	A11300 P188/11 (Shed and Water Tank) P267/14 (Retrospective Planning Approval – Conversion of Shed to Dwelling P268/14 (Retrospective Planning Approval – Patio Area)
Prepared by	Brendan Jeans, Senior Planning Officer
Supervised by	Bronwyn Southee, Executive Manager Development Services
Voting requirements	Simple Majority
Documents tabled	Nil
Attachments	1. Locality Plan 2. Plans indicating the plans for the Shed (Approved 2011) 3. Pictures from Applicant indicating works undertaken in unapproved conversion of shed into a dwelling 4. Plans submitted by Applicant outlining the result of the conversion of the Shed to Dwelling with Patio 5. Officer's emails to Applicant dated 17 November 2014, 23 December 2014 requesting further information and clarifying process.

Background
Council's consideration is requested for a retrospective approval for the conversion of a non-habitable outbuilding to a dwelling at Lot 125 Turtledove Drive, Lower Chittering.

Date	Item/Outcome
2 May 2011	Planning Approval granted for a single 150m² shed (Class 10A)
19 May 2011	Building Permit was granted for a Class 10A non-habitable building
17 September 2014	During a routine compliance check of outstanding conditions of planning approvals, it was brought to the Shire's attention that the Class 10A shed had been fitted out and was being used as a dwelling.
17 September 2014	Landowners met with Shire Officers, where they advised that they had fitted out their approved Class 10A shed with the intention of selling it as a residence (not approved).
18 September 2014	Application for retrospective Planning Approval was received for the conversion of the Class10A shed to a Class1A Dwelling
17 November 2014	Email from Shire Planning Officer to Applicant advising of outstanding information required to be submitted. The Officers email has been attached for Councils reference.
November 2014	A BA-13 Application for a Building Approval Certificate to convert the Class10A to a Class1A was lodged with the Shire along with; an Electrical Certificate and an Energy Efficiency Compliance Certificate for 7.8 Stars
19 December 2014	Meeting between landowners and Shire Officers to determine a path forward and to discuss outstanding information as detailed in email dated 17 November 2014.
23 December 2014	Follow up email was sent following the meeting held on the 19 December to clarify requirements and outstanding information required in order to progress this application. Email is attached for Councils reference (attachment 5).
17 June 2015	Application was presented to Council for its consideration, laid on the table pending further information.
15 July 2015	Application being presented to Council for consideration.

On 2 May 2011 the Shire granted Planning Approval for a 150m² (10m x 15m – outbuilding/shed), the subject of this application with a condition of approval noting that (3) *'the proposed shed is for storage purposes only and not for residential habitation'*. The Applicant had also signed a statutory declaration varying the Local Planning Policy advising that they would not use the shed for residential habitation. A Building License was granted on 19 May 2011 for a 'Class 10A – Non Habitable Outbuilding'.

Investigation by the Shire's Compliance Officer revealed the landowner had undertaken significant building works to the interior of the shed for the purposes of residential occupation and constructed patio additions and shed extension without prior approval.

As a result of the Shire's compliance actions, the landowner submitted an application for retrospective planning approval to convert the existing shed to a dwelling including the patio and shed extension.

The proposed floor plan reflects the existing fit out to the shed, although a 5m garage extension and patio has not been approved with the original shed. The landowner has also provided plans showing additions (improvements) to the existing shed to enhance the visual amenity.

The landowner is seeking approval to convert the shed to a dwelling to live on site.

Consultation

Internal consultation between the Applicant and the Shire's previous Planning Officer took place initially in November 2014.

In December 2014; the Applicant met with the Shire's Senior Planning Officer, Compliance Officer and Principal Building Surveyor and the issues discussed were reiterated via email (dated 23 December 2014) with the following key points outlined:

> *Consideration of Proposal*
> *'the Shire's position for conversion of a shed to a dwelling is generally not to support given a shed is only for storage purposes (as declared by yourselves in the Statutory Declaration) and to approve a conversion sets a precedence of the Shire supporting unauthorised works and supporting the unauthorised fit out and occupation of sheds. This position is evident in a recent decision of a shed conversion that was refused at a recent Council Meeting. It will be difficult for the Shire to recommend Council to approve your proposal as it would undermine the previous decision and therefore it would be at Council's discretion, in which they have the ability, to go against the Shire's recommendation to approve it.*
>
> *With the above being said if Council determine not to approve your conversion you do have the ability to have the decision reviewed by the State Administrative Tribunal (SAT) where the decision may be mediated. In this situation SAT would take a neutral stance and make their own assessment of the decision, which could either remain with the original decision or change it.*
>
> *I understand with all the information the Shire has requested does seem like an effort for a proposal in which the Shire is in a difficult situation to approve however I feel you should be prepared for a decision either way and I can only comment on what we have considered previously. I can only reiterate what was suggested in the meeting, and that is to "put your best foot forward" and make the application, and all supporting documentation, as succinct as possible, in an effort to assist Council in making their decision'.*

Statutory Environment

Local: *Shire of Chittering Town Planning Scheme No. 6*

The objectives of the Rural Residential in the *Shire of Chittering Town Planning Scheme No. 6* (Clause 4.2.6) are:

- *To designate areas where rural residential developments can be accommodated without detriment to the environment or the rural character of the area.*
- *To meet the demand for a rural lifestyle on small lots, generally in excess of 1 hectare.*
- *To maintain and enhance the rural character and amenity of the locality.*

In the Rural Residential Zone, the *Town Planning Scheme No. 6* requires that for Planning Approval under Section 5.8.3 that:

> *'Residential use will not be permitted in a building other than one approved by the Council for that purpose, except that Council may grant permission for occupation of a caravan for a period not exceeding 12 months if a building permit for a dwelling is concurrently in force or an application for such is before Council'.*

National: *Building Code of Australia*

It should be noted by Council that there is a significant structural difference between a Class 10A – shed and a Class 1A – Dwelling.

Class 10A, pursuant to the National Construction Code (NCC) is defined as a **Non Habitable structure**, such as a private garage, carport, shed or the like.

A Class 1A is a single dwelling, being a detached house or one of a group of two or more attached dwellings.

The NCC defines a Habitable Room as that used for normal domestic activities.

General differences

a) Class 10A

- No damp proof membrane required under the slab.
- No termite treatment required as the structure is generally concrete floor with steel frame. The only way to apply an effective under slab treatment is to use a 300mm "grid system" which requires core holes covering the entire slab, to ensure adequate coverage and compliance with AS 3660.1. This becomes cost prohibitive.
- The slab is "generally" thinner, possibly 75mm, assuming the applicant is not thinking ahead about the conversion and the use is restricted to a 10a and the loads are the slab are not excessive.
- Part 3.12 of the NCC, Energy Efficiency, will not apply to a Class 10A.
- Smoke alarms do not apply.

b) Class 1A

- Energy efficiency compliance is difficult to achieve in a building not designed for that purpose, (it should be noted that the applicant has supplied the Shire with confirmation that the building has met energy efficiency requirements).
- Insulation is also a major problem as is the lack of damp proof membrane under the slab.
- Sanitary facilities required that may not have been a problem with the shed.
- Some weatherproofing requirements of the NCC are more stringent for Class 1A (dependent on type of construction) and the consequences of failure are more serious.

The major structural consideration with this proposed building conversion is the slab and footings as mentioned above the slab required for a Class 1A requires a membrane and needs to be thicker than for a 10A. It is considered that it may not be achievable to convert the slab and footings to a Class1A standard and as the Applicant has not supplied details confirming it can (which have been outstanding for 6+ months now) it is considered that this is not achievable.

Policy Implications

Local: *Local Planning Policy No 7 Outbuildings and Swimming Pools*

Local: *Local Planning Policy No 27 Living in Sheds*

5. POLICY STATEMENT

5.1 Living in sheds is prohibited;

5.2 Where a building permit for a dwelling is concurrently in force or an application has been lodged, Council may grant permission for occupation of a caravan on the lot for a period not exceeding 12 months;

5.3 The period of caravan occupancy may be extended, provided satisfactory progress is being made on the construction of the dwelling;

5.4 Council approval is not required for short-term (week-end) caravan occupancy;

5.5 A pre-requisite for any long-term caravan occupancy is:
a) water storage in tanks of not less than 120,000 litres capacity, as specified in Local Planning Policy No. 21 Fire Management Plans;
b) connection to an approved effluent disposal system;

5.6 Caravans used for short or long term occupancy may be stored in a shed or otherwise be provided with weather protection;

5.7 Sheds may be provided with a toilet and hand basin/wash trough but no other plumbing facilities (see also Local Planning Policy No. 7 Outbuildings).

5.8 Applications for caravan occupancy may be dealt with by the Chief Executive Officer under delegation issued by Council in accordance with Section 5.42 of the Local Government Act 1995.

Financial Implications
Nil

Strategic Implications
Nil

Site Inspection
Site inspections have been undertaken by Shire Officers; the first site inspection which triggered the retrospective application and second inspection to view the proposal for the purpose of a thorough assessment. The inspection confirmed the subject structure is not visible from Turtledove Drive due to native vegetation and downward slope from the road. The Applicant has supplied a number of photographs indicating the works which have been undertaken in documenting the conversion of the shed to a dwelling and also the patio area (which does not have approval) as requested by the Shire. These can be viewed in attachment 3.

Triple Bottom Line Assessment
Economic implications
There are no known significant economic implications associated with this proposal.

Social implications
The conversion of the shed into a dwelling provides an undesirable precedent in the Shire where it has clearly been stated that living in sheds is prohibited. Furthermore, it is considered that the support of permanent occupation of sheds would create undesirable development and amenity issues in the Shire. It is evident throughout the Shire that the general public have concerns of the negative impact on the visual amenity of their neighbourhood by sheds being occupied and the consistency of Council requirements (both planning and building) for construction of high standard dwellings in the Shire.

Environmental implications
There are no known significant environmental implications associated with this proposal.

Comment

Local Planning Policy No 27 Living in Sheds

The existing shed was granted planning approval as a shed (outbuilding) and a building permit as a 'non-habitable outbuilding'. The Policy was prepared and adopted to address the issues of the unauthorised 'fitout' and occupation of sheds in the Shire. To support the proposal to formalise the conversion of the shed to a dwelling would directly conflict with this Policy and its intentions and would undermine Council's direction to not support the unauthorised occupation of sheds.

Site inspection

As mentioned previously, the Shire's inspection of the site noted the existing shed structure is not visible from the road and hence the visual impact on the public is not existent. It is however visible from building envelopes on neighbouring properties, which still creates the same issues as if were visible to the general public from a road, albeit a lesser impact.

Compliance

The Shire has ongoing compliance issues with the unauthorised occupation of sheds; particularly in Rural Residential properties. Due to this issue, since the adoption of *Local Planning Policy No 7 Outbuildings and Swimming Pools* in 2008 (in particular 5.2(b)), the Shire does not accept applications for a shed on vacant land (except Agricultural Resource zoned land) and requires a building permit for a dwelling to be issued prior to or concurrently with a shed application. Whilst this does not stop landowners from building the shed prior to the dwelling, it does greatly reduce the likelihood of occupation of sheds, particularly long term occupation, and requires greater commitment by landowners to plan and build the dwellings on the property.

In regards to Lot 125 Turtledove Drive, the landowner was able to obtain planning approval for the shed prior to a dwelling in 2011 subject to a Statutory Declaration being provided stating they would not live in the shed. Since obtaining approval the landowner has undertaken significant works to the interior of the shed to make it suitable for living. Approval of the application would therefore set an undesirable precedent to approve the retrospective conversion of the shed to a dwelling, especially given the Shire's ongoing efforts to rectify the issue. This should also be considered not only in the future dealings of 'living in sheds' matter, but previous Council decisions to not support such conversions for the reasons set out in this report and the Officer Recommendation.

It is considered that there has been ample consultation between the landowners and Shire. The landowner met with the Shire's Officers on a number of occasions as detailed above. In these meetings and subsequent emails (attachment 5) it was outlined the information required by the Applicant to submit in order to proceed with the retrospective planning approval and also outlined the building requirements should planning approval be granted to avoid giving the landowners false hope (i.e. if retrospective building approval was not possible). The Shire has maintained the position at all times that the planning application would highly likely be recommended to be refused and that this application process would give the landowners the respect of due process being carried out. As detailed above there are detailed structural modifications required to achieve Class1A compliance, in addition to this, even if it were achievable to structurally meet the requirements, Council has numerous policies specifying its position not to support Class10A - shed to Class 1A- house conversions, ultimately this Class10A still has the appearance of a 10A shed not a Class 1A habitable dwelling.

In addition to the conversions of the shed to a dwelling, the application also retrospectively seeks approval for patio additions and the shed extension. The Shire considers these additions can be approved under delegated authority, however for simplicity and transparency has been incorporated into this report.

Based on the above, it is recommended that Council refuse the application for the conversion of the shed to a dwelling and patio.

9.1.1 OFFICER RECOMMENDATION

Moved Cr Douglas/ Seconded Cr Mackie

1. Refuse the retrospective approval for the conversion of the outbuilding (P118/11) to a Dwelling (P 267/14) on Lot 125 Turtledove Drive, Lower Chittering for the following reasons:
   a. the proposal is inconsistent with *Local Planning Policy No. 27* in the following ways:
      i. Does not meet the objective to '*ensure an adequate standard of residential accommodation'*.
      ii. Policy Statement 5.1 states '*Living in sheds is prohibited'*.
      iii. Policy Statement 5.7 states '*Sheds may be provided with a toilet and hand basin/wash trough but no other plumbing facilities'*.
   b. the proposal contravenes Clause 5.8.3 of the Scheme:
      'Residential use will not be permitted in a building other than one approved by the Council for that purpose, except that Council may grant permission for occupation of a caravan for a period not exceeding 12 months if a building permit for a dwelling is concurrently in force or an application for such is before Council'.
   c. Approval of such would set an undesirable precedent to retrospectively support the unauthorised conversion of a structure approved and designed for the purpose of storage only.
   d. Approval of such would contradict the Statutory Declaration made by the landowners stating 'no intentions to reside in the shed' which was provided for the Shire to vary 5.2(b) of the Local Planning Policy No 7 in approving a shed on a vacant property.

2. Direct the landowner to remove all building works necessary for the outbuilding (P118/11) to comply with the approvals granted by the Shire within six (6) months to the satisfaction of the Chief Executive Officer.

3. Approve the Garage Extension (P268/14) to the outbuilding subject to the following conditions:
   a. Roofing to be tiled or pre-painted material such as the product colourbond.
   b. Structure shall not be used for residential habitation.

4. Approve the 'Lean To addition (P268/14) to the outbuilding subject to the following condition:
   a. Roofing to be tiled or pre-painted material such as the product colourbond.

AMENDMENT

Moved Cr Rossouw / Seconded Cr Douglas

That approvals granted in 3 and 4 are subject to the fulfillment of Points 1 and 2 above.

THE AMENDMENT WAS PUT AND DECLARED CARRIED 6/1

9.1.1 SUBSTANTIVE MOTION / COUNCIL RESOLUTION – 040715

Moved Cr Douglas/ Seconded Cr Mackie

1. Refuse the retrospective approval for the conversion of the outbuilding (P118/11) to a Dwelling (P 267/14) on Lot 125 Turtledove Drive, Lower Chittering for the following reasons:
   a. the proposal is inconsistent with *Local Planning Policy No. 27* in the following ways:
      i. Does not meet the objective to '*ensure an adequate standard of residential*

***accommodation'*.**

ii. **Policy Statement 5.1 states '*Living in sheds is prohibited'.***

iii. **Policy Statement 5.7 states '*Sheds may be provided with a toilet and hand basin/wash trough but no other plumbing facilities'*.**

b. the proposal contravenes Clause 5.8.3 of the Scheme:
'Residential use will not be permitted in a building other than one approved by the Council for that purpose, except that Council may grant permission for occupation of a caravan for a period not exceeding 12 months if a building permit for a dwelling is concurrently in force or an application for such is before Council'.

c. Approval of such would set an undesirable precedent to retrospectively support the unauthorised conversion of a structure approved and designed for the purpose of storage only.

d. Approval of such would contradict the Statutory Declaration made by the landowners stating 'no intentions to reside in the shed' which was provided for the Shire to vary 5.2(b) of the Local Planning Policy No 7 in approving a shed on a vacant property.

2. Direct the landowner to remove all building works necessary for the outbuilding (P118/11) to comply with the approvals granted by the Shire within six (6) months to the satisfaction of the Chief Executive Officer.

3. Approve the Garage Extension (P268/14) to the outbuilding subject to the following conditions:
- **a. Roofing to be tiled or pre-painted material such as the product colourbond.**
- **b. Structure shall not be used for residential habitation.**

4. Approve the 'Lean To addition (P268/14) to the outbuilding subject to the following condition:
- **a. Roofing to be tiled or pre-painted material such as the product colourbond.**

5. That the approvals granted in 3 and 4 are subject to the fulfillment of Points 1 and 2 above.

THE SUBSTANTIVE MOTION WAS PUT AND DECLARED CARRIED 6/1

Outline Development Plan

Lot 300 Settlement Road, Bindoon

Prepared for Thomas James

Prepared by:

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Document details:
File: 972
Revision: 1
Date: November 2014
Author: MT/SR
Approved: MT

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Executive summary

APPLICANT:	Land Insights PO Box 289 Mount Lawley WA 6929 Ph: 9271 8506 Fx: 9370 5786 Email: admin@landinsights.com.au
CLIENT:	Thomas James
LOCATION:	Lot 300 Settlement Road, Bindoon
CERTIFICATE OF TITLE:	Lot 300 on D74951 Volume: 1852, Folio: 778
LOCAL GOVERNMENT:	Shire of Chittering
SITE AREA:	19.9 hectares
DATE:	November 2014

Land Insights act on behalf of Thomas James and lodge this Outline Development Plan on their behalf. The Outline Development Plan is seeking to subdivide Lot 300 Settlement Road, Bindoon ('the site') into 2 Rural Small Holding lots.

It is requested that the Shire of Chittering approve this Outline Development Plan.

Table of Contents

EXECUTIVE SUMMARY I

1 INTRODUCTION 1

1.1 BACKGROUND 1
1.2 SITE LOCATION 1
1.3 OWNERSHIP 2

2 POLICY AND STATUTORY FRAMEWORK 3

2.1 SHIRE OF CHITTERING TOWN PLANNING SCHEME NO. 6 3
2.2 SHIRE OF CHITTERING LOCAL PLANNING STRATEGY 5
2.3 SHIRE OF CHITTERING LOCAL BIODIVERSITY STRATEGY 6

3 SITE CONTEXT 7

3.1 CURRENT LAND USE 7
3.2 SURROUNDING LAND USE 7

4 SITE ANALYSIS 8

4.1 TOPOGRAPHY AND LANDFORM 8
4.2 VEGETATION 8
4.3 SITE CONTAMINATION 10
4.4 SOIL TYPES 10
4.5 HYDROLOGY 12
4.6 ACCESS 17
4.7 HERITAGE 17
4.8 ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT 17

5 OUTLINE DEVELOPMENT PLAN 19

5.1 PROPOSED LAND USE 19
5.2 LOT SIZES AND BUILDING ENVELOPES 19
5.3 PUBLIC OPEN SPACE 19
5.4 BUSHFIRE HAZARD 19
5.5 ENVIRONMENTAL PROTECTION 19
5.6 RELATIONSHIP TO SURROUNDING LOCALITY 19
5.7 ROADS AND ACCESS 20
5.8 INFRASTRUCTURE AND SERVICES 20
5.9 LOT LAYOUT RATIONALE 22
5.10 DEVELOPMENT PROVISIONS 22
5.11 IMPLEMENTATION 23

6 CONCLUSION 25

Appendices

APPENDIX A – PLANS
APPENDIX B – CERTIFICATE OF TITLE
APPENDIX C – WATERCOURSE FORESHORE ASSESSMENT FORM
APPENDIX D – ABORIGINAL HERITAGE DATABASE SEARCH
APPENDIX E – BUSHFIRE HAZARD ASSESSMENT
APPENDIX F – AMENDMENT DOCUMENTATION

1 Introduction

1.1 Background

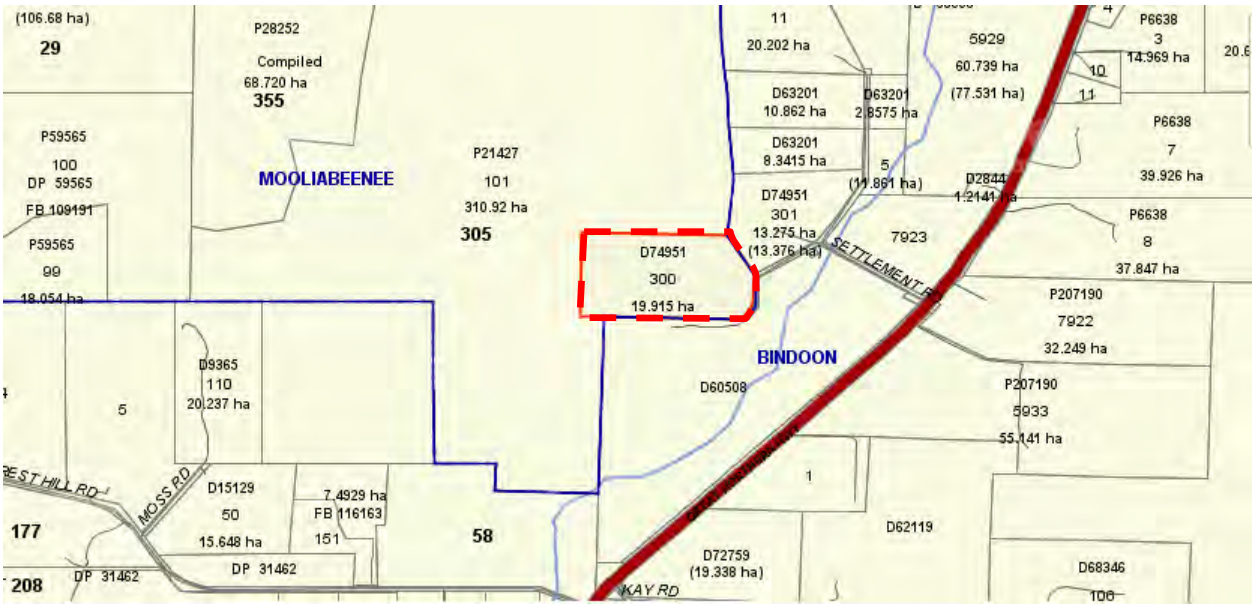
Land Insights act for Thomas James and lodge this Outline Development Plan (ODP) on their behalf. The ODP proposes to subdivide Lot 300 Settlement Road, Bindoon ('the site') into 2 Rural Small Holding lots.

The proposed subdivision will consolidate the existing orchard operation onto one lot and will create an additional lot for rural living.

The purpose of the ODP is to satisfy the requirements of the Shire of Chittering Town Planning Scheme No. 6 which requires that subdivision in the Rural Small Holding zone is supported by an ODP (Clause 5.8).

1.2 Site location

The site is located on Lot 300 Settlement Road, Bindoon and is approximately 2km north of the Bindoon townsite. Surrounding land is used as rural small holding and agricultural land uses. A site location plan is included below.



1.3 Ownership

Lot 300 is owned by Thomas James and Annie James. A copy of the Certificate of Title is attached at Appendix B. Details are as follows:

- Volume: 1852
- Folio: 778
- Diagram: D74951

2 Policy and Statutory Framework

2.1 Shire of Chittering Town Planning Scheme No. 6

The Shire of Chittering Town Planning Scheme No. 6 indicates that the site is zoned *Agricultural Resource.*

It is proposed that the site is rezoned to the *Rural Small Holdings* zone. The objectives of the *Rural Small Holding* zone are addressed in the following table.

OBJECTIVE	COMMENT
To preserve productive land suitable for intensive horticulture and other compatible productive rural uses in a sustainable manner	**Complies:** The purpose of rezoning is to facilitate future subdivision of the site into 2 lots. One lot will consolidate the existing orchard and another lot will be created for a potential intensive horticulture operation.
To protect the landform and landscape values of the district against despoliation and land degradation	**Complies:** The proposed rezoning and subdivision will not lead to degradation of landscape and landform values.

This ODP has been prepared in accordance with Clause 5.8.1 of the TPS which provides a list of the details to be addressed in the plan.

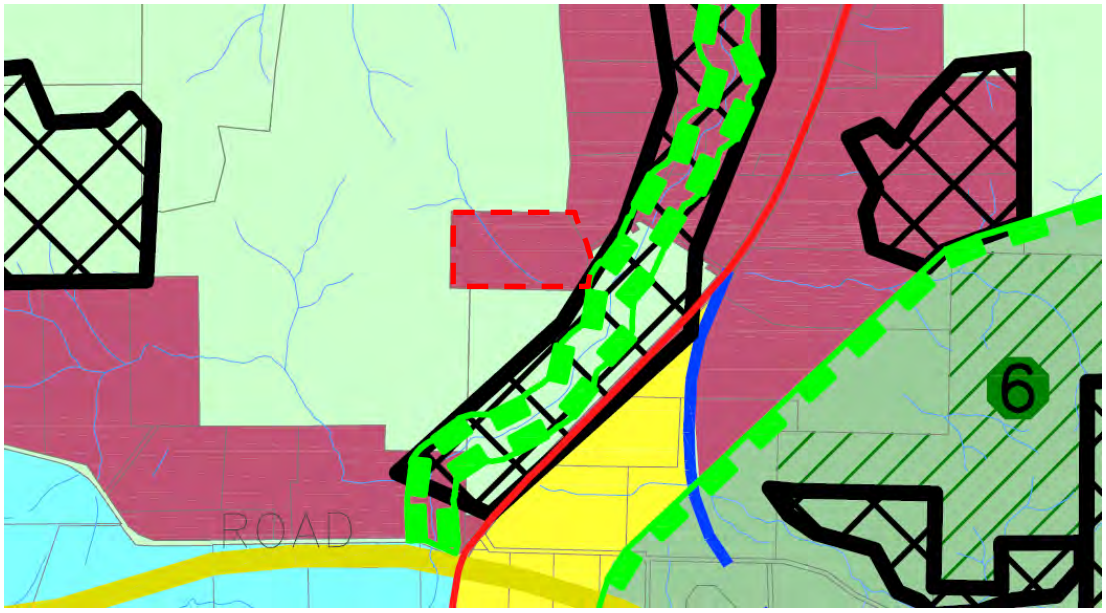
Under Clause 5.8.1, the TPS states that an ODP shall address the following:

- *Lot sizes, dimensions and identification of building envelopes or building exclusion areas*
- *Areas to be set aside for public open space, pedestrian accessways, horse trails, community facilities, etc, as may be considered appropriate*
- *Strategic firebreaks*
- *Any Catchment Management Plan recommendations*
- *Any part of the natural environment which is required to be protected from degradation or required for landscape protection*
- *An assessment of the presence and impacts of Dieback in consultation with Council and the appropriate State government environmental agency and the ability of the subdivision design and works to mitigate against the spread and effect of Dieback*
- *Any facilities which the purchasers of the lots will be required to provide (eg. their own potable water supply, liquid or solid waste disposal, etc)*
- *Areas where conventional septic tanks may not be suitable*
- *The description of adjoining land(s) and their uses*
- *Remnant vegetation and any land affected by rare and endangered flora and fauna*
- *Location of watercourses, drainage lines and areas of inundation and the distance of any infrastructure from these*
- *Identify the area/s that need to comply with an approved Environmental Management Plan.*

Where relevant, in the context of this particular site, the ODP shows all of the above features.

2.2 Shire of Chittering Local Planning Strategy

The Shire of Chittering draft Local Planning Strategy (LPS) shows that the site is located within the *Rural Small Holding* zone. It is located within the 'North Bindoon' Rural Small Holding precinct. The Rural Small Holding precincts are described as areas located around the Bindoon townsite where there are appropriate soil types for productive hobby farms and opportunities for conservation, along important streamlines and wetlands.



The strategies and actions for the Rural Small Holding zone are addressed in the table below.

OBJECTIVE	COMMENT
To maximise the productive capacity of good soils.	The proposed rezoning and subdivision will consolidate the existing orchard on one lot and will create an additional lot which will have the potential to be used for productive rural use.
To allow for rural environment around nominated service centres.	The proposed lots can continue to be used for agriculture and the site is located approximately 1km from the Bindoon town site.
To include stringent conditions for protection and reparation of watercourses and wetlands.	A seasonal watercourse is located on the property. It flows from north-west to south-east and flows during storm events. The watercourse has been degraded from past agricultural use, however it will be fenced and managed appropriately and will be rehabilitated over time.

OBJECTIVE	COMMENT
To provide a working rural living presentation around centres.	The site will be developed as rural small holding including rural living and some farming in close proximity to Bindoon.
To allow for eco-tourism and agro tourism and special developments appropriate to rural production.	No tourism is proposed as part of the development, but the subdivision will provide some opportunity.
To allow for a range of lot sizes befitting the landform constraints with an absolute minimum lot area of 4ha.	The proposed lot sizes are well above 4ha in size and have been designed according to the landscape.
All subdivision and development shall compliment land capability analysis, protection of natural streamlines and remnant vegetation and clearly demonstrate the availability of water.	The site has been assessed by a qualified environmental consultant and natural features have been identified and mapped. The proposed subdivision has been designed to complement the natural features of the site. Water availability is addressed below.
To minimise vehicular access to highways and regional roads.	Access will be onto Settlement Road which is a rural road.
To promote and investigate the provision of potable water supply.	Adequate water for domestic use can be collected in rainwater tanks, however the potential to provide potable water will be investigated.
To promote consolidation of existing Rural Small Holdings	The site is located within the North Bindoon Rural Small Holding precinct as identified in the Strategy and therefore is part of a larger rural small holding area.
To require developer contributions in accordance with an adopted developer contributions scheme.	Developer contributions will be determined at a later stage.

The draft Strategy indicates that the site is located within the Chittering Valley geographical unit. This unit is described as arable land which is mainly used for grazing and horticulture with large areas of steep gradients remaining covered by remnant vegetation.

2.3 Shire of Chittering Local Biodiversity Strategy

No Local Natural Areas are identified across the site. The site is not located within a high conservation value area.

The site is within the Bindoon Precinct. The objective of this precinct is to '*maintain a local centre attuned to dispersed settlement pattern.*

3 Site Context

3.1 Current land use

The land is currently used for rural purposes and an orchard exists across the eastern and central parts of the property. It has been largely cleared of native vegetation to facilitate farming, some small areas of remnant vegetation exist at the western part of the site. Improvements on the site include two sheds, one at the eastern side near the entrance to the property and another older shed in the centre of the property. A house is located at the south-west corner. A water tank and small dam are located at the northern boundary.

The property is used for horticulture including orange orchards.

3.2 Surrounding land use

All properties directly adjoining the site are currently zoned *Agricultural Resource* and are used for rural purposes. The Brockman River runs a short distance to the east of the property. The Bindoon townsite is located approximately 1km south.

4 Site Analysis

4.1 Topography and Landform

The site gently slopes from east to west with the lowest point being 130m AHD at the eastern boundary. The land rises gently at first and more steeply at the western side where it reaches approximately 170m AHD.

4.2 Vegetation

Vegetation across the site has been historically been cleared to facilitate rural use. It comprises a few small remnants of regrowth on the hills, fringing vegetation along the watercourse and windbreaks. Native vegetation on the western hills comprise of jarrah, marri and wandoo woodland. The windbreaks were planted many years ago and comprise of she oaks. The vegetation along the watercourse was historically cleared and existing vegetation was planted many years ago. The vegetation comprises a mixture of native and exotic species. Bluegum eucalypts were planted along the northern side of the watercourse many years ago. The watercourse is overgrown with grass is most locations.

Woodland area at the western side of the property.

Vegetation condition across the majority of the site is classified as *Completely Degraded* due to the cleared and disturbed nature of the site. The patches of native vegetation remaining at the western and southern portions of the site are classified as *Good* condition (according to the Keighery B J (1994) vegetation scale in Bush Forever, Volume 2 (WAPC, 2000)) which shows signs of multiples disturbances such as clearing, stock grazing and weeds.

There might be some clearing required around the existing residence at the south-west corner for fire management, however the level of clearing is not extensive and will largely restricted to parkland cleared trees. The proposed subdivision is not expected to have a significant impact on vegetation or habitat for native fauna. The outcomes of the bushfire hazard assessment (Appendix E) indicates that the site has a low bushfire attack level (BAL) and low fire risk across a majority of the site which means that clearing of vegetation is not necessary to mitigate fire risk.

Rows of Bluegum Eucalyptus trees along the watercourse.

Sheoak windbreaks are located throughout the orchard.

4.3 Site Contamination

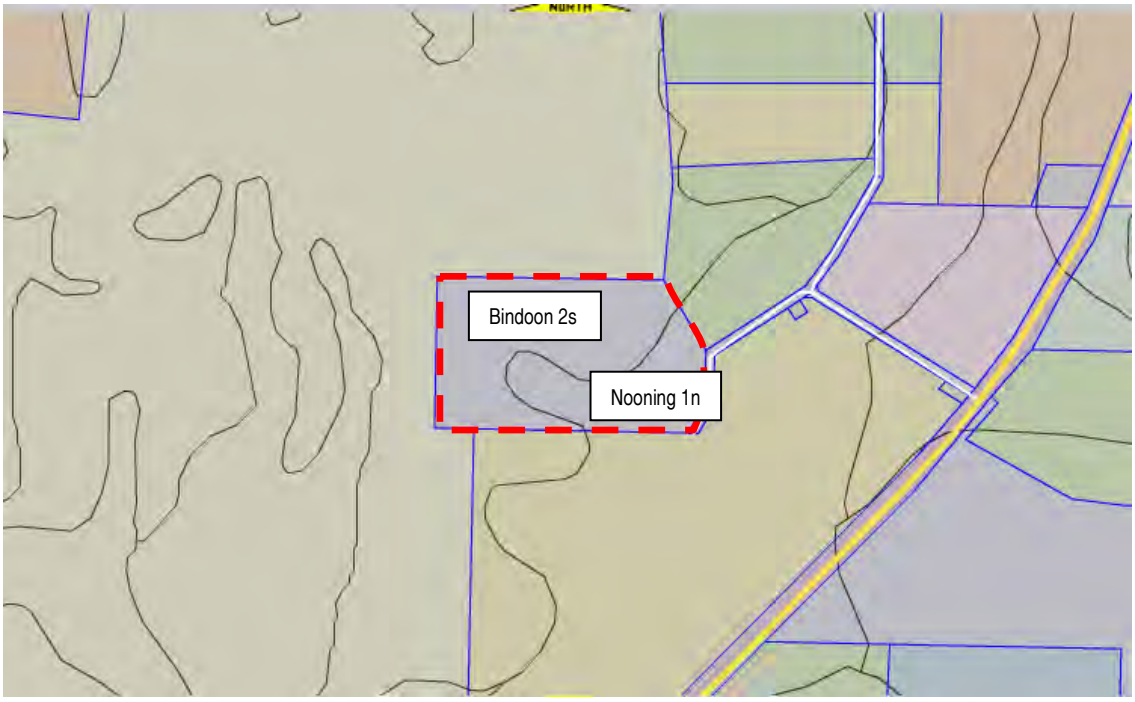
The ODP area is not known to have contained any notifiable activities that would cause the site to be included within the Contaminated Land Register.

4.4 Soil Types

The soil types have been mapped at a broad scale by the Department of Agriculture and Food (DAFWA) and can be found on their online mapping system at http://spatial.agric.wa.gov.au/slip/products_view.asp.

The soil-landscape units mapped across the site include:

- Bindoon 2s Phase – western portion of the site
- Nooning 1n Phase – eastern portion of the site



The descriptions and soil types for these soil-landscape units are described in the table below.

Soil landscape unit	Description	Dominant soil types
Bindoon 2s Phase	Mixed red and yellow duplex soils with some uniform fine and medium textured, structured soils	• Red shallow loamy duplex • Stony soil • Red deep loamy duplex
Nooning 1n Phase	Salt affected yellow, brown and grey gradational and duplex soils	• Yellow/brown shallow loamy duplex

The soil qualities of the above soil-landscape units are described in the table below. It includes hazard risk for flooding, waterlogging, phosphorus export, water erosion and wind erosion.

Soil landscape unit	Flood Risk	Waterlogging	P export	Water Erosion	Wind erosion
Bindoon 2s Phase	3-10% has moderate to high risk	3-10% has moderate to very high risk	>70% has high to extreme risk	>70% has high to extreme risk	3-10% has high to extreme risk
Nooning 1n Phase	>70% has moderate to high risk	>70% has moderate to very high risk	>70% has high to extreme risk	10-30% has high to extreme risk	3-10% has high to extreme risk
Overall	**Low to high risk**	**Low to high risk**	**High risk**	**High to Moderate risk**	**Low risk**

The land degradation qualities reflect the soil types found across the site. The soil on the lower elevated section across the eastern portion of the site has a higher risk of flooding, waterlogging and Phosphorus export and a low water and wind erosion risk. The more elevated western side has a lower flooding and waterlogging risk but high Phosphorus export risk and water erosion risk.

The high phosphorus export risk across the site might require the need for Alternative Treatment Units for effluent waste disposal.

The land capability has also been mapped by DAFWA and is based on the qualities of the soil types. The land capability for annual and perennial horticulture, dryland cropping and grazing is shown in the table below.

Soil landscape unit	Annual horticulture	Perennial horticulture	Dryland cropping	Grazing
Bindoon 2s Phase	>70% has low capability	50-70% has low capability	>70% has low capability	>70% has moderate to high capability
Nooning 1n Phase	>70% has low capability	>70% has low capability	>70% has low capability	>70% has low capability
Overall	**Low capability**	**Low capability**	**Low capability**	**Low to moderate capability**

The site has low land capability for all four agricultural land use categories.

4.5 Hydrology

Surface water

A seasonal watercourse dissects through the centre of the property and flows from north-west to south east. The watercourse flows during storm events only and is in degraded condition from past disturbances associated with rural use of the property. Some attempts have been made to revegetate along the watercourse and a fence is located along the northern edge to keep stock out. A watercourse assessment in accordance with the Department of Water's River Restoration Manual has been undertaken for the watercourse and the outcomes are presented below.

The Brockman River runs to the south-east of the site. This area is classified as a *Conservation* Category Wetland in the Geomorphic Wetlands Dataset of the Swan Coastal Plain. The floodplain area is classified as a *Multiple Use* category wetland. This area extends up to the south-east boundary of the site.

No Public Drinking Water Source Areas (PDWSAs) are located onsite or in close proximity.

The site is located within a *Rights in Water and Irrigation Act 1914* Proclaimed Groundwater Area and within a Proclaimed Surface Water Area (the Swan River System).

Watercourse assessment

A watercourse foreshore assessment has been conducted to determine the existing condition and appropriate management in accordance with the Department of Water's River Restoration Manual. The biophysical assessment was carried out using *River Restoration Manual RR3* as a guide. The following characteristics were assessed:

- Bank stability
- Foreshore vegetation
- Stream cover

- Habitat diversity

The biophysical characteristics of the watercourse have been assessed based on the *Foreshore Condition Assessment* methodology in *River Restoration RR3 Foreshore Condition Assessment in Farming Areas*. The *Foreshore Condition Assessment Form* was completed for the watercourse. The form gives a score for each feature of the watercourse and, when combined together, provides an overall condition rating. The features are categorised into bank stability, foreshore vegetation, stream cover and habitat diversity. A copy of the form is at Appendix C.

Foreshore condition
The foreshore is rated *C Eroding or Erosion Prone* due to the existence of high levels of erosion, subsidence in some sections and the steep banks (very steep in most locations). This is described in the River Restoration Manual as:

Trees remain, and possibly some large shrubs or tree grasses, but the understorey consists entirely of weeds, mainly annual grasses. The trees are generally resilient or long lived species but there is little or no evidence of regeneration. The shallow-rooted weedy understorey provides no support to the soil, and only a small increase in physical disturbance will expose the soil and make the river embankments and floodway vulnerable to erosion.

The typical foreshore condition along the watercourse.

Fencing
The northern side of the watercourse is fenced, the southern side is not fenced.

Bank stability and erosion

The soil cohesion is *good* as the soil mainly comprises loamy soils. The general bank steepness is *very steep* in most sections where erosion is most severe and *steep* is sections where grass cover has provided some bank stability.

Floodway and Bank Vegetation

The watercourse has been cleared in the past and most of the vegetation is regrowth or has been planted by the landowner. Most of the floodway is still cleared and is covered in exotic grass. The vegetation is mostly located on the northern side of the watercourse (consisting of she oaks and exotic Bluegum Eucalypts), with some limited vegetation on the southern side. It has been rated as *moderate* due to the mixture of exotic and native species and the amount of past disturbance and clearing.

Verge vegetation

The verge vegetation is rated as *moderate* due to a mix of native vegetation and exotic species. A majority of the verge vegetation is grass cover with limited understorey species. The southern side of the watercourse is mostly cleared and covered in exotic grass. The verge vegetation is also relatively narrow, ranging from a few meters to less than 10 meters along the length of the watercourse through the property.

Verge and fringing vegetation along the watercourse, largely consists of Bluegum Eucalypts, sheoaks and exotic grasses.

Stream cover

The stream cover is rated as *good* along a majority of the watercourse due to the existence of the Bluegum Eucalypts along the northern side, natural regeneration of plants along the verge and the grass cover throughout which provides abundant shade and stream cover.

A typical example of the amount of stream cover along the watercourse.

Habitat diversity

The length of the watercourse through the property doesn't allow for too many habitat types to be located through the property. Only a few habitat types exists along the watercourse including seasonal water in the watercourse, some small cascades and some pools of water. The habitat is rated as *moderate* due to the occurrence of a few seasonal habitat types.

Habitat areas include pools of water and seasonally flowing water.

Overall environmental rating
The overall environmental rating is calculated as *moderate*. This is reflective of the past disturbances to the watercourse from historical farming uses and the regeneration and rehabilitation which has been undertaken by the landowner in recent decades.

4.6 Access

The site is currently accessed via Settlement Road which runs along the eastern boundary of the site. Settlement Road extends off Great Northern Highway.

4.7 Heritage

A search was conducted on the Department of Aboriginal Affairs Aboriginal Heritage Enquiry System database for identified Aboriginal sites. The results found that there are no sites currently identified on or directly surrounding the site (Appendix D).

A search was also conducted on the Heritage Council WA Heritage Places Database. No places of heritage value are identified on the database on the subject site.

There are no known sites of heritage value on the subject site to protect. Therefore, no heritage protection provisions are considered necessary.

4.8 Environmental impact assessment and management

The environmental impact assessment reviews the environmental features of the site and how the proposed subdivision will impact on environmental values.

Environmental management aims to reduce, minimise and avoid environmental impact and proposes was to improve environmental features where possible. Management is directly related to the environmental impacts of the proposed development.

The result of the environmental assessment and management actions are described in the following table.

FEATURE	COMMENT AND MANGEMENT
Vegetation and habitat	The property has been historically cleared to facilitate agricultural use and only small patches of degraded woodland exist on elevated areas at the southern and western side of the site. These woodland areas will be located on the new proposed lot which will be created for rural living purposes. Although some clearing may be required around the existing residence at the south-west corner of the property, extensive clearing is not proposed and these woodland areas will be retained. The vegetation along the watercourse will be retained and further protected through the propose subdivision by the installation of fencing to keep stock out and further revegetation. These areas of remaining vegetation can provide habitat for native fauna in the area.
Watercourses	The watercourse naturally divides the property in half and as such, the proposed boundary will be placed along the northern side of the watercourse so it will remain within the southern lot. Retaining the watercourse on one lot will assist with future management. A watercourse foreshore assessment has been undertaken as part of this application and the overall condition rating has been identified as *moderate*. The proposed subdivision will facilitate better management of the watercourse through fencing along both sides and revegetation of the fringing vegetation.
Soils and land quality	The soil and land quality information indicates that the more productive soils are located across the eastern portion of the site. This area is currently used for agriculture and orchards exist over most of this area. The western part of the site has poorer quality soils and as such has not been used for farming for many years. This area is more suited to rural living than farming and it is proposed that the subdivision to create a separate lot for rural living over this portion of the site will assist in better land management more suited to the qualities of this lot.

It is concluded that the proposed subdivision will result in an overall environmental benefit through better management of vegetation, land qualities and the watercourse.

5 Outline Development Plan

5.1 Proposed land use

The proposed subdivision will divide the western side of the lot to facilitate rural living use and the remainder of the property will continue as a functioning orchard.

5.2 Lot sizes and building envelopes

The proposed lot sizes will be 6.72 hectares and 13.2 hectares.

A dwelling is already located at the south-west corner of the proposed lot. A new dwelling can be established on eastern lot.

5.3 Public Open Space

No public open space is provided as part of this development.

5.4 Bushfire Hazard

A Bushfire Hazard Assessment was undertaken by Bushfire Prone and is included at Appendix E. The assessment shows a *low* bushfire hazard across a majority of the site, with *moderate* risk to the areas of vegetation at the western end of the property. No areas of *extreme* bushfire hazard risk are located on or directly surrounding the property. The site is located greater than 100m from the nearest *extreme* hazard risk area.

The assessment also concluded that the Bushfire Attack Levels (BALs) across the site are *low*. The report suggests that as an alternative solution, any future dwellings on the proposed lots are to be constructed to a BAL 12.5 standard, thus ensuring enhanced occupant protection from the impact of bushfire.

5.5 Environmental Protection

The site has been designed to reduce and minimise environmental disturbance and to avoid degradation where possible. Environmental protection measures have been proposed such as fencing areas of remnant vegetation and watercourses to reduce future disturbance and to promote natural restoration. Environmental protection and management is discussed in more detail in Section 4.11 above.

5.6 Relationship to surrounding locality

The surrounding properties are also used as operating farms, many of which include orchards and some grazing. The land use will not change significantly as a result of the subdivision (the new lot will largely be for rural living purposes) and therefore will have minimal impact on the neighbours.

5.7 Roads and Access

Access for both lots will be from Settlement Road which leads from Great Northern Highway. Settlement Road is bitumen sealed approximately half way and gravel the remainder of the length. Access to proposed Lot 3001 is via Settlement Road, 707m west of the Great Northern Highway intersection. Proposed Lot 3002 will be accessed via a battleaxe located 888m along Settlement Road from the Great Northern Highway. The length of Settlement Road does not comply with the Performance Criteria as it is greater than 600m. The Bushfire Hazard Assessment proposes that buildings are constructed to a higher standard as an acceptable solution to the non-compliant site access distance. Further information is provided in the Bushfire Hazard Assessment report at Appendix E.

A battleaxe will run along the southern boundary to provide access to the new rear lot (proposed lot 3002). It will be 344m in length which is below the maximum length of 600m and complies with the Planning for Bushfire Protection Guidelines.

5.8 Infrastructure and services

Water supply

Reticulated water is currently not available to the site. It is proposed that each lot will be supplied with potable water from a 120,000L tank (of which 10,000L is to be kept for firefighting purposes).

The collection area required to supply an appropriate volume of water for each dwelling has been calculated based on the formula in the Rural Planning Guidelines (WAPC, 2014):

> *Collection area (m^2) = average household water consumption (L) divided by (0.85 x (local rainfall – 24mm))*

The Water Corporation Perth Residential Water Use Study 2008-2009 specifies that the average household water consumption is 106,000L (including outdoor and indoor use) per person. The average household size in WA (as determined by the Australian Bureau of Statistics) is 2.6 people for each dwelling. Therefore, the average water use for each household is 275,600L.

Out of the 106,000L total, approximately 56,000L is used internally. For an average household size of 2.6 people this is 145,600L per annum.

The local average rainfall was obtained from the Bureau of Meteorology website. The Marbling station was chosen because it had a relatively good historic record and was largely complete (http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_num=009024). The average rainfall for Bindoon station is 665.8mm.

The collection area for each person is calculated as follows:

$$\text{Collection area} = \frac{56{,}000\text{L/person/year}}{0.85 \times (665.8 - 24)}$$

$$\text{Collection area} = \frac{56{,}000\text{L}}{545.53\text{mm}}$$

This equals a collection area of 102.6m^2 per person. For an average family of 2.6 people this is 267m^2 and for 4 people this equals a collection area of 410.6m^2.

A roof space area of 410m^2 is considered reasonable for a family home.

If total water consumption is considered in the collection area calculation (including outside use) the average household water consumption is 106,000L per person per year. The collection area is calculated as follows:

$$\text{Collection area} = \frac{106{,}000\text{L/person/year}}{0.85 \times (665.8 - 24)}$$

$$\text{Collection area} = \frac{106{,}000\text{L}}{545.53\text{mm}}$$

This equals a collection area of 194.3m^2 per person. For an average family of 2.6 people this is 505.2m^2 and for 4 people this equals a collection area of 777.22m^2.

The collection area can include outbuildings such as sheds, garages, verandas and outdoor living areas.

Wastewater

On-site effluent disposal units need to be installed to treat wastewater. The soil types across the majority of the site have high phosphorus export risk so it might be necessary to use Alternative Treatment Units (ATUs). The Outline Development Plan provisions require the installation of ATUs across the entire site unless a future land owner wishes to undertake further on-site geotechnical and capability assessment at the time of seeking Council approval for the installation of a wastewater system. All effluent disposal systems will be located at least 100 metres away from any watercourse on the site.

Power

Western Power connection is available in the area and will be required to connect the site once subdivision occurs.

5.9 Lot Layout Rationale

The rear lot will be subdivided as this land has low productivity for horticulture and is better suited as a rural living property. The watercourse through the centre of the property naturally divides the site. The new lot boundary has been placed along the western side of the watercourse so that it will retain on the existing horticulture property. The new lot boundary also aims to retain good quality soils on the horticulture lot and leaves unproductive soils on the new rural living lot.

5.10 Development Provisions

The following development provisions apply.

1. Development Plan:
This Development Plan has been endorsed by the Shire Council. Subdivision and development should generally be in accordance with this Plan.

2. Development Requirements and Lot Sizes:
In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No. 6 for the Rural Small Holding Zone apply.

3. Building Envelopes:
Buildings, water tanks, waste disposal and a building protection zone for fire management are to be contained within a cleared area not to exceed a maximum of 2000m^2 without the prior approval of Council; prior to confirming a building clearing area a vegetation survey is to be undertaken to ensure no rare or endangered flora is present; buildings are to have setbacks in accordance Local Planning Policy No. 18 Setbacks, with minimum setbacks from cadastral boundaries as follows:

Road	20 metres
Rear	20 metres
Sides	15 metres

4. Fencing:
In accordance with Local Planning Policy No. 22 - Fences, the construction of a fence is permitted within the building clearing area, any previously cleared area and adjoining an authorised fire break.

5. Crossovers:
The construction of a crossover to each lot is to be in accordance with Council's specifications.

6. Potable Water:
Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire-fighting purposes and fitted with a standard Camlock valve.

7. Land Management:
The maintenance of any watercourse and fire breaks on private property is the responsibility of the

owner/occupier.

8. Bores, Dams and Water Courses:
The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.

9. Fire Control:
A Fire Management Plan will be prepared and endorsed by the Shire of Chittering. Development shall accord to the requirements of the Fire Management Plan.

10. Permitted Uses:
A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.

11. Stocking Restrictions:
Stock shall be restricted to previously cleared areas. The prior approval of Council is required for the keeping of any grazing animal on a lot. If, in the opinion of Council, any lot is overgrazed or constitutes land degradation, it may order the removal of any or all stock, either temporarily or permanently until the remedial works are carried out by the landowner to render the land stable.

12. Poultry:
The keeping of poultry for domestic purposes is permitted, in accordance with the Shire's Health Local Law.

13. Non-reflective Materials:
All buildings shall be constructed with roofs of non-reflective materials.

14. Effluent Disposal:
Alternative Treatment Units (ATUs) with nutrient retention capability are required on all lots unless proven otherwise by the developer / landowner in accordance with the soil capability for the site.

15. Vendor Responsibility:
The developer/vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

5.11 Implementation

This ODP will be considered and endorsed by both the Shire of Chittering and the Western Australian Planning Commission.

Following endorsement, a separate Subdivision Application will be lodged for subdivision.

The process for implementation will require the following:

- This Outline Development Plan to be approved by the Shire of Chittering and the Western Australian Planning Commission.
- Subdivision application to be approved by the Western Australian Planning Commission.

6 Conclusion

This proposal report accompanies a proposed Outline Development Plan over Lot 300 Settlement Road, Bindoon to develop the site for Rural Small Holding. As demonstrated by the assessment contained within this report and attached documents, the proposed development achieves compliance with the Shire's planning policies and is an acceptable land use for this site.

We therefore recommend that Council and the WAPC favourably consider and endorse the proposed Outline Development Plan as the basis for the future use and development of the site.

APPENDIX A

Plans

LEGEND
- Site boundary
- Watercourse
- Proposed Layout

PROPOSED LOT 3002
6.7254ha

PROPOSED LOT 3001
13.1951ha

300

301

SETTLEMENT RD

SETTLEMENT RD SOUTH

SETTLEMENT RD

GREAT NORTHERN HWY

5

1

7923

7922

5933

2

landinsights
PLANNING DESIGN ENVIRONMENT

0 50 100 Metres

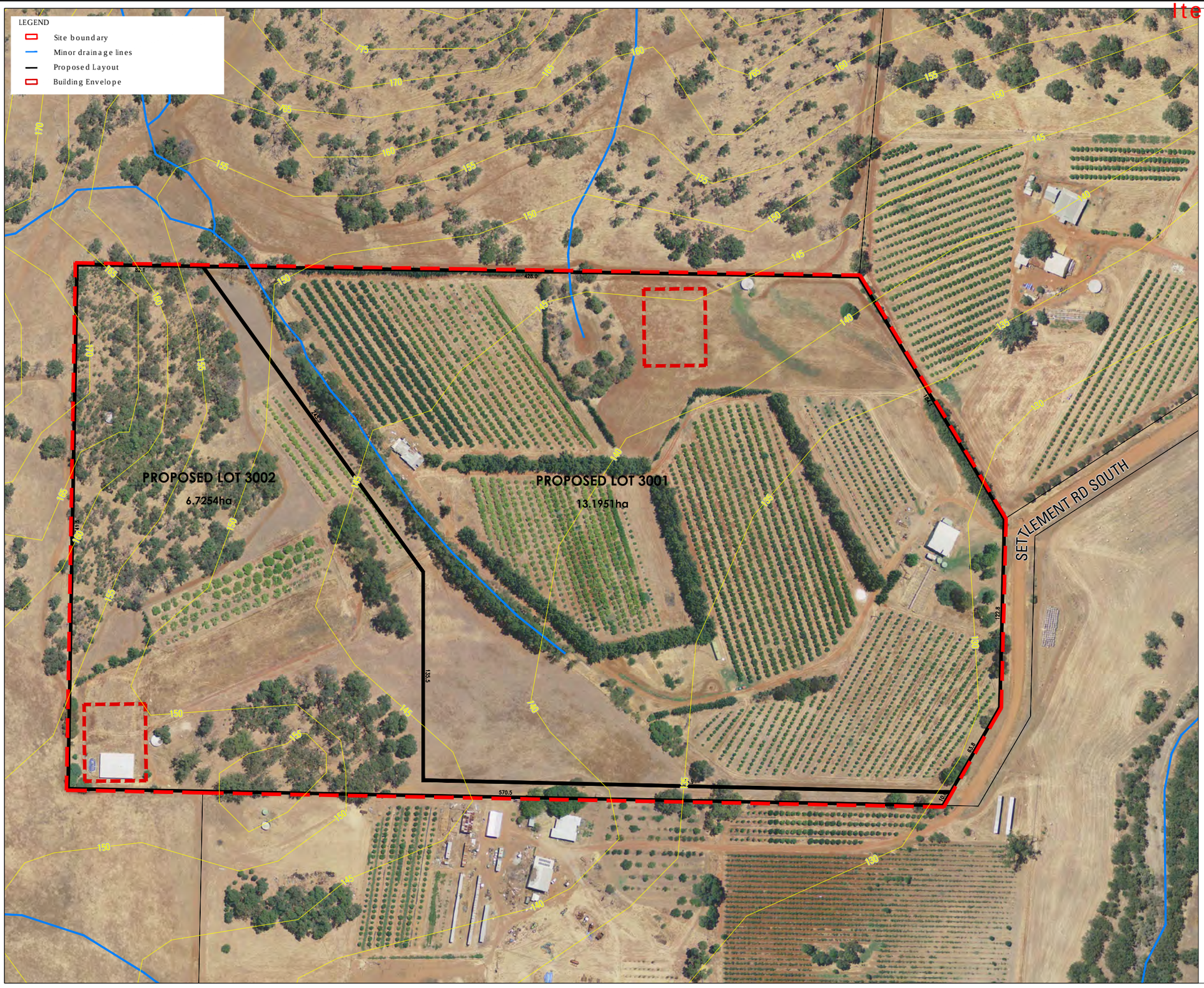
NORTH

DEVELOPMENT PLAN - CONTEXT
LOT 300 SETTLEMENT ROAD, BINDOON
SHIRE OF CHITTERING

PO BOX 289 MT LAWLEY, W.A. 6929
phone : (08) 9271 8506 fax : (08) 6161 2597 email : admin@landinsights.com.au

All dimensions and areas subject to survey

PLAN NO: 972-01 SCALE: 1:4000 (A3) DATE: August 2014



DEVELOPMENT PROVISIONS
The following development provisions apply.

1.Development Plan:
This Development Plan has been endorsed by the Shire Council. Subdivision and development should generally be in accordance with this Plan.

2.Development Requirements and Lot Sizes:
In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No. 6 for the Rural Residential Zone apply.

3.Building Envelopes:
Buildings, water tanks, waste disposal and a building protection zone for fire management are to be contained within a cleared area not to exceed a maximum of 2000m² without the prior approval of Council; prior to confirming a building clearing area a vegetation survey is to be undertaken to ensure no rare or endangered flora is present; buildings are to have setbacks in accordance Local Planning Policy No. 18 Setbacks, with minimum setbacks from cadastral boundaries as follows:

Road	20 metres
Rear	20 metres
Sides	15 metres

4.Fencing:
In accordance with Local Planning Policy No. 22 - Fences, the construction of a fence is permitted within the building clearing area, any previously cleared area and adjoining an authorised fire break. Where natural vegetation adjoins a road reserve, no fence is to be constructed between the road reserve and the building clearing area. Elsewhere, no boundary fences are permitted without planning consent of the Council. Where a fence crosses a strategic fire break a gate of approved design is to be provided.

5.Crossovers:
The construction of a crossover to each lot is to be in accordance with Council's specifications.

6.Potable Water:
Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire-fighting purposes and fitted with a standard Camlock valve.

7.Land Management:
The maintenance of any drainage swales, easements, fire breaks and vegetation on private property is the responsibility of the owner/occupier.

8.Bores, Dams and Water Courses:
The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.

9.Bushfire Management:
A Bush Fire Management Plan in accordance with the Western Australian Planning Commission's relevant Bush Fire Risk Management policies, is to be prepared to accompany any future subdivision application, to the satisfaction of the Local Government and relevant State Authority for Fire and Emergency Services.
Land subject of this Development Plan is designated bushfire-prone for the purpose of triggering the Building Code of Australia's bushfire construction requirements. Any buildings to be erected pursuant to this Development Plan shall comply with the requirements of Australian Standard 3959 (as amended).

10. Permitted Uses:
A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.

11. Stocking Restrictions:
Stock shall be restricted to previously cleared areas. The prior approval of Council is required for the keeping of any grazing animal on a lot. If, in the opinion of Council, any lot is overgrazed or constitutes land degradation, it may order the removal of any or all stock, either temporarily or permanently until the remedial works are carried out by the landowner to render the land stable.

12. Poultry:
The keeping of poultry for domestic purposes is permitted, in accordance with the Shire's Health Local Law.

13. Non-reflective Materials:
All buildings shall be constructed with roofs of non-reflective materials.

14. Effluent Disposal:
Aerobic Treatment Units (ATUs) with nutrient retention capability are required on all lots unless proven otherwise by the developer / landowner in accordance with the soil capability for the site.

15. Vendor Responsibility:
The developer/vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

landinsights
PLANNING DESIGN ENVIRONMENT
PO BOX 289 MT LAWLEY, W.A. 6929
phone : (08) 9271 8506 fax : (08) 6161 2597 email : admin@landinsights.com.au

0 50 100 Metres

NORTH

All dimensions and areas subject to survey

PLAN NO: 972-01 SCALE: 1:2000 (A3) DATE: August 2014

DEVELOPMENT PLAN - LOT LAYOUT
LOT 300 SETTLEMENT ROAD, BINDOON
SHIRE OF CHITTERING

APPENDIX B

Certificate of Title

WESTERN AUSTRALIA

REGISTER NUMBER	
300/D74951	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	N/A

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 1852 FOLIO 778

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 300 ON DIAGRAM 74951

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

THOMAS JAMES
ANNIE JAMES
BOTH OF 3 DUNVEGAN ROAD, APPLECROSS
AS JOINT TENANTS

(T K249408) REGISTERED 29 JUNE 2007

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *K249409 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 29.6.2007.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1852-778 (300/D74951).
PREVIOUS TITLE: 1659-679.
PROPERTY STREET ADDRESS: 45 SETTLEMENT RD, MOOLIABEENEE.
LOCAL GOVERNMENT AREA: SHIRE OF CHITTERING.

NOTE 1: DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING K249409

LANDGATE COPY OF ORIGINAL NOT TO SCALE Wed Oct 22 17:10:24 2014 JOB 45944477

Landgate
www.landgate.wa.gov.au

APPENDIX C

Watercourse Foreshore Assessment Form

Foreshore Condition Assessment Form:
for paddock scale surveys

General details

Name: _____
Address : 45 Settlement Road, Bindoon
Ph no.: _____
Date: October 2014
Farm name: _____
Farm address: _____
Nearest road intersection Settlement Rd and Great Northern Hwy
Catchment Swan River/Brockman River
Stream name: N/A
Location: ~~Bal~~ N/A
Lot no.: Lot 300
Owner/manager assent obtained
Yes ☑ No ☐

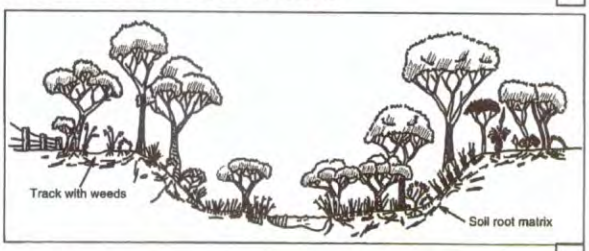
Foreshore assessed
One side ☐ Both sides ☑

Site diagram

See attached plan

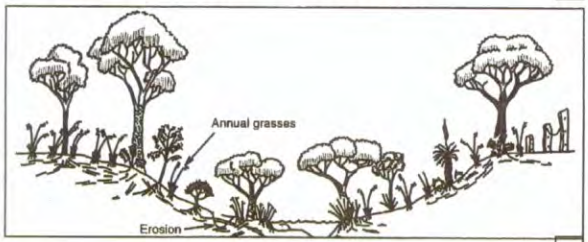
Foreshore Condition

A. PRISTINE - FEW WEEDS ☐



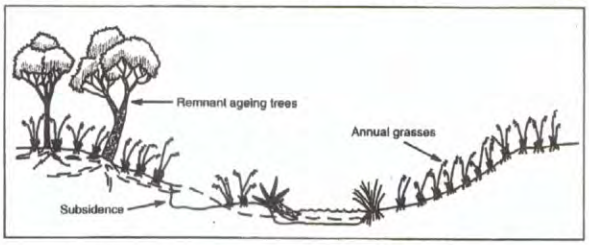
A1 Pristine: no weeds ☐
A2 Near pristine: some weeds ☐
A3 Slightly disturbed: local weed infestations ☐

B. DEGRADED - WEED INFESTED ☐



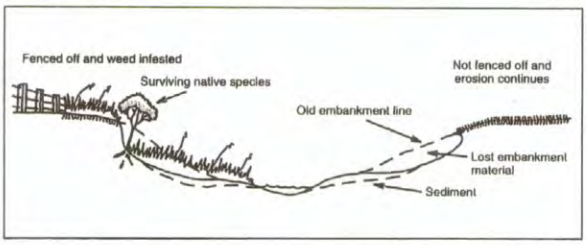
B1 Weed infested: understorey mainly natives ☐
B2 Heavily weed infested: natives = weeds ☐
B3 Degraded: understorey weed dominated ☐

C. ERODING OR EROSION PRONE ☑



C1 Erosion prone: understorey weeds only ☐
C2 Surface erosion: soil exposed ☐
C3 Erosion and subsistence present ☐

D. DITCH OR DRAIN ☐



D1 Eroding: extensive erosion and siltation ☐
D2 Freely eroding (ditch): erosion / siltation out of control ☐
D3 Weed infested (drain): highly eroded ☐

Fencing Status

Fenced off: Yes ☐ No ☐ Partly - northern side

Stock access to foreshore: Yes ☐ No ☐ Partly

Crossing point present: Yes ☑ No ☐

Comments:

Additional Information

General bank steepness

- ☑ > 60° — Very Steep
- ☐ > 45-60° — Steep
- ☐ > 10-45° — Moderate
- ☐ > 0-10° — Slight

Major erosion/siltation

- ☐ None
- ☑ Points of cutting/undercutting
- ☐ Major undercutting
- ☐ Firebreak/track washouts
- ☐ Bank subsidence
- ☐ Large deposits

Vegetation health

- ☑ Looks healthy
- ☐ Some sick trees
- ☐ Many sick and/or dying trees
- ☐ Many dead trees
- ☐ Mainly long dead trees

Tree seedlings and saplings present
Yes ☑ No ☐

General soil cohesion

☐ Excellent - rock, stone ☑ Good - clay, clayey loam ☐ Poor - sand, loose loam

Comments:

Overall stream environmental rating

Rating	Floodway & Bank vegetation	Verge vegetation	Stream cover	Bank stability & sediment	Habitat diversity
Excellent	(15)	(8)	(8)	(8)	(6)
Good	(12)	(6)	(6)	(6)	(4)
Moderate	(6)	(4)	(4)	(4)	(2)
Poor	(3)	(2)	(2)	(2)	(1)
Very poor	(0)	(0)	(0)	(0)	(0)

Surrounding landuse:

- ☐ Conservation reserve (8)
- ☐ Remnant bush (6)
- ☐ Rural residential (4)
- ☐ Urban (2)
- ☑ Agriculture (2)
- ☐ Commercial/industrial (1)

TOTAL SCORE = **ENVIRONMENTAL RATING =** 24

Score	40-55	30-39	20-29	10-19	0-9
Rating	Excellent	Good	Moderate	Poor	Very poor

Table 1. Living streams survey: information to determine stream health ratings

	Floodway and Bank Vegetation	Verge Vegetation	Stream Cover	Bank Stability and Erosion	Habitat Diversity
Excellent	• Healthy undisturbed native vegetation. • No weeds. **(15 points)**	• Healthy undisturbed native vegetation. • Verges more than 20 metres wide. **(8 points)**	• Abundant cover: shade, overhanging vegetation. • Snags, leaf litter, rocks and/or aquatic vegetation in stream. **(8 points)**	• No erosion or subsidence or sediment deposits. • Dense vegetation cover on banks and verge. • No disturbance. **(8 points)**	• Three or more habitat type. • Some permanent water. **(6 points)**
Good	• Mainly healthy undisturbed native vegetation. • Some weeds. • No recent disturbances. **(12 points)**	• Mainly healthy undisturbed native vegetation. • Verges less than 20 metres wide. **(6 points)**	• Abundant shade and overhanging vegetation. • Some cover in the stream. **(6 points)**	• No significant erosion, subsidence or sediment deposits in floodway or on lower banks. • May be some soil exposure and vegetation thinning on upper bank and verge. **(6 points)**	• Two habitat type. • Some permanent water. **(4 points)**
Moderate	• Good vegetation cover, but a mixture of native and exotic species. • Localised clearing. • Little recent disturbance. **(6 points)**	• Good vegetation cover, but mixture of exotic and native species. • Verges 20 m wide or more. **(4 points)**	• Some permanent shade and overhanging vegetation. • Some instream cover. **(4 points)**	• Good vegetation cover. • Only localised erosion, bank collapse and sediment heaps. • Verges may have sparse vegetation cover. **(4 points)**	• Mainly one habitat type with permanent water, or a range of habitats with no permanent water. **(2 points)**
Poor	• Mainly exotic ground cover. • Obvious site disturbance. **(3 points)**	• Narrow verges only (< 20 m wide). • Mainly exotic vegetation. **(2 points)**	• Channel mainly clear. • Little permanent shade or instream cover. **(2 points)**	• Extensive active erosion and sediment heaps. • Bare banks and verges common. • Banks may be collapsing. **(2 points)**	• Mainly one habitat type with no permanent water. **(1 points)**
Very Poor	• Mostly bare ground or exotic ground cover (i.e. pasture gardens or weeds but no trees). **(0 points)**	• Mostly bare ground or exotic ground cover (i.e. pasture gardens or weeds but no trees). **(0 points)**	• Virtually no shade or instream cover. **(0 points)**	• Almost continuous erosion. • Over 50% of banks collapsing. • Sediment heaps line or fill much of the floodway. • Little or no vegetation cover. **(0 points)**	• Stream channellised. • No pools, riffles or meanders. • The stream forms a continuous channel. **(0 points)**

APPENDIX D

Aboriginal Heritage Database Search

Search Criteria

0 Registered Aboriginal Sites in Custom search area; 413729.96mE, 6529691.95mN (zone 50) : 414689.04mE, 6530346.99mN (zone 50)

Disclaimer

The *Aboriginal Heritage Act 1972* preserves all Aboriginal sites in Western Australia whether or not they are registered. Aboriginal sites exist that are not recorded on the Register of Aboriginal Sites, and some registered sites may no longer exist.

The information provided is made available in good faith and is predominately based on the information provided to the Department of Aboriginal Affairs by third parties. The information is provided solely on the basis that readers will be responsible for making their own assessment as to the accuracy of the information. If you find any errors or omissions in our records, including our maps, it would be appreciated if you email the details to the Department at HeritageEnquiries@daa.wa.gov.au and we will make every effort to rectify it as soon as possible.

Copyright

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Coordinate Accuracy

Accuracy is shown as a code in brackets following the coordinates.

Terminology (NB that some terminology has varied over the life of the legislation)

Place ID/Site ID: This a unique ID assigned by the Department of Aboriginal Affairs to the place

Status:

- **Registered Site**: The place has been assessed as meeting Section 5 of the *Aboriginal Heritage Act 1972*
- **Other Heritage Place which includes:**
  - **Stored Data / Not a Site:** The place has been assessed as not meeting Section 5 of the *Aboriginal Heritage Act 1972*
  - **Lodged:** Information has been received in relation to the place, but an assessment has not been completed at this stage to determine if it meets Section 5 of the *Aboriginal Heritage Act 1972*

Access and Restrictions:

- **File Restricted = No:** Availability of information (other than boundary) that the Department of Aboriginal Affairs holds in relation to the place is not restricted in any way.
- **File Restricted = Yes:** Some of the information that the Department of Aboriginal Affairs holds in relation to the place is restricted if it is considered culturally sensitive. This information will only be made available if the Department of Aboriginal Affairs receives written approval from the informants who provided the information. Download the Request to Access Restricted Information letter and form.
- **Boundary Restricted = No:** place location is shown as accurately as the information lodged with the Registrar allows.
- **Boundary Restricted = Yes:** To preserve confidentiality the exact location and extent of the place is not displayed on the map. However, the shaded region (generally with an area of at least 4km²) provides a general indication of where the place is located. If you are a landowner and wish to find out more about the exact location of the place, please contact DAA.
- **Restrictions:**
  - **No Restrictions:** Anyone can view the information.
  - **Male Access Only:** Only males can view restricted information.
  - **Female Access Only:** Only females can view restricted information

Legacy ID: This is the former unique number that the former Department of Aboriginal Sites assigned to the place. This has been replaced by the Place ID / Site ID.

List of Registered Aboriginal Sites with Map

No Results

Legend

Selected Heritage Sites

- Registered Sites
- Aboriginal Community Occupied
- Aboriginal Community Unoccupied
- Town
- Search Area

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APPENDIX E

Bushfire Hazard Assessment

BUSHFIRE HAZARD ASSESSMENT – MAPPING AND REPORT

LOT 300 (45) SETTLEMENT ROAD BINDOON

Project No: 14208
Report Date: November 2014

Document Control Record

Site Details:	**Lot 300 Settlement Road, Bindoon**
Client:	Mr M Taylforth / Landsights
Assessment Type:	Bushfire Hazard Assessment (BHA)
Prepared By:	**Bushfire Prone Planning (BPP Pty Ltd)** ABN: 39 166 551 784 M: 0438 946 285 / 0459 558 986 Email: enquiries@bushfireprone.com.au
Reference:	14208
Document Status & Date:	Final November 2014

Prepared by:	**Reviewed and approved by:**
David Carroll	**Kathy Nastov**
Date: 20-Nov-14	**Date:** 20-Nov-14

Amendment number:	Details of Amendment:	Date:	Approved by:

Disclaimer: The measures contained in this Bushfire Management Plan are considered to be minimum standards and they do not guarantee that a building will not be damaged in a bushfire. All surveys, forecasts, projections and recommendations made in this report associated with the project are made in good faith on the basis of information available to Bushfire Prone Planning at the time; and achievement of the level of implementation of bushfire precautions will depend among other things on the actions of the landowners or occupiers over which Bushfire Prone Planning has no control. Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences (whether or not due to the negligence of the consultants, their servants or agents) arising out of the services provided by the consultants.

Contents

1 Introduction and Purpose 4
2 Site Details....5
2.1 Residential Development Proposal; 7
2.2 Vegetation 7
2.3 Topography....7
3 Statutory Conditions....8
4 Bushfire Hazard Assessment 9
4.1 Method of Assessment 9
4.2 Hazard Assessment – Strategic Level 9
4.3 Bushfire Attack Level (BAL) 11
4.4 Bushfire Hazard Management 13
5 Bushfire Protection Performance Criteria 15
5.1 Location (P1)....15
5.2 Vehicular Access (P2) 16
5.3 Water (P3)....20
5.4 Siting of Development (P4)....21
5.5 Design of Development (P5)....24
6 Fire Fighting Service....25
7 Implementation and Responsibilities....26
8 References....29

1 Introduction and Purpose

Mr M Taylforth of Landinsights Design commissioned Bushfire Prone Planning to develop a Bushfire Hazard Assessment for a subdivision application for the subdivision of Lot 300 Settlement Road, Bindoon, located within the Shire of Chittering. The subdivision application is for the subdivision of existing Lot 300 Settlement Road into 2 Lots. This Plan relates to bushfire protection measures recommended for consideration for the individual building envelopes and proposed buildings on each Lot.

The purpose of this plan is to provide guidance on how to plan for and manage the potential bushfire threat of the specified area. The Plan identifies the bushfire risk and addresses requirements of local government and the responsibilities for both the developers and property owners. This Bushfire Hazard Assessment has been prepared to determine the suitability of the site for subdivision in order to comply with the requirements of a condition of development by the Shire of Chittering. The Plan details the specific bushfire management requirements that will be implemented within the development and design.

The objectives of this Plan are to:

- Define areas where values are located
- Define and rank bushfire hazard areas
- Define management responsibilities
- Define bushfire management responsibilities
- Provide performance criteria and acceptable solutions (non-construction).

2 Site Details

The site is Lot 300 Settlement Road, Bindoon located within the Shire of Chittering (Figure 1) and is situated on the west side of Settlement Road sitting within an Agricultural Resource Zone (Shire of Chittering Town Planning Scheme Number 6 Local Planning Policy Number 32). Lot 300 is 19.9205 hectares in size with the proposed subdivision being the western Lot 3002 - 6.7254 hectares and eastern Lot 3001 – 13.1951 hectares in size (Figure 2).

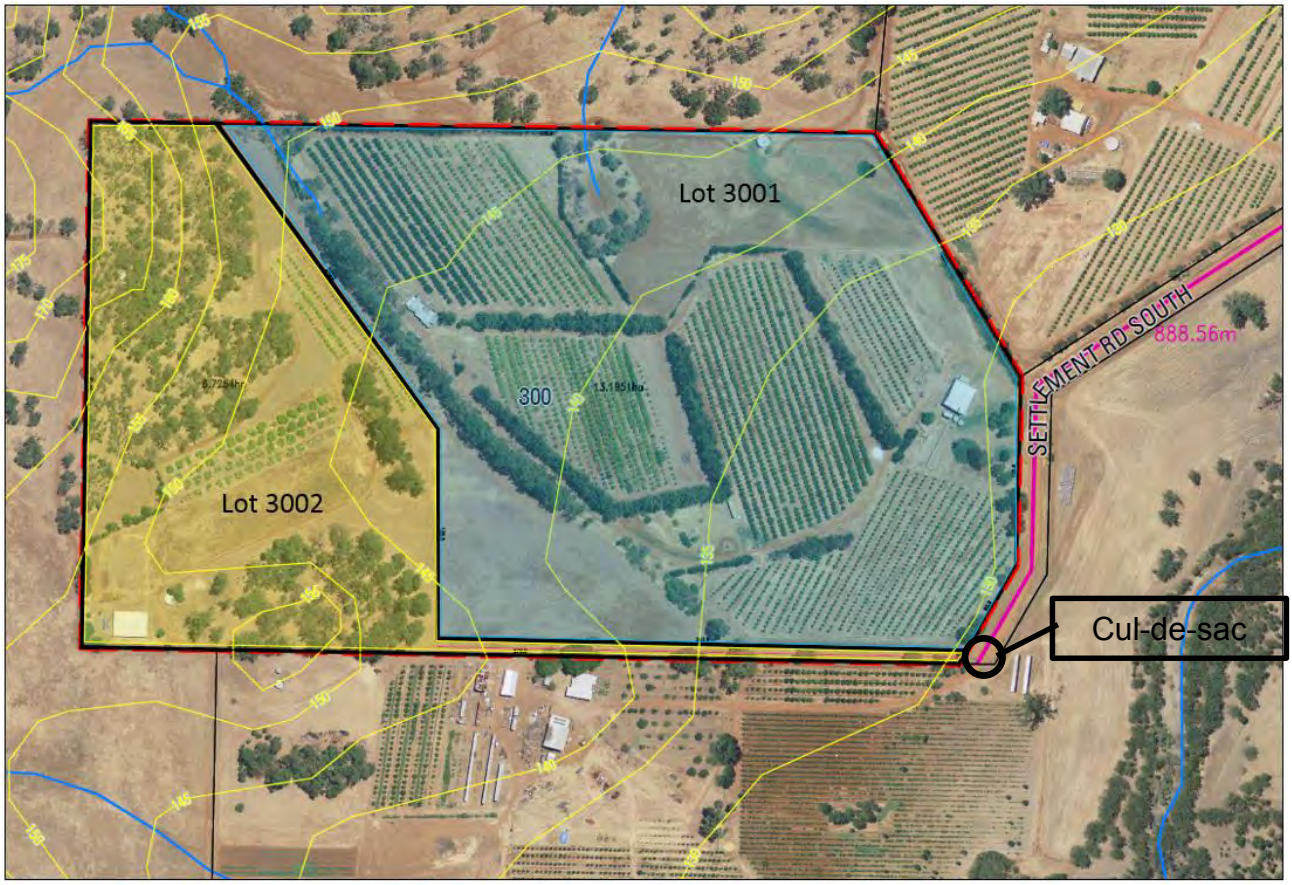


Figure 1: Lot 300 Settlement Road, Bindoon with Proposed Subdivision (Source: Landinsights).

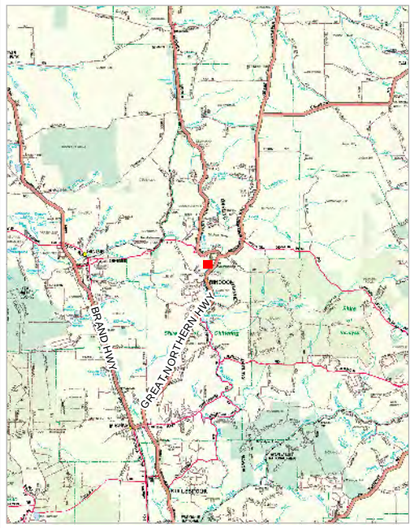
Figure 2.
Proposed Subdivision

Lot 300 Settlement Rd,
Mooliabeenee

LEGEND

- Lot 300
- Proposed Subdivision
- Battleaxe Access
- Blocks

LOCALITY



0 25 50 75 100 125
Meters

N
W E
S

BUSHFIRE PRONE PLANNING

Date: 5/11/2014

2.1 Residential Development Proposal;

Lot 300 Settlement Road is proposed for subdivision into two lots being Lot 3001 and Lot 3002.

2.2 Vegetation

The subject site vegetation is comprised of orchards, cultivated gardens, managed grassland and remnant bushland on the upper western slope. Neighbouring property consists of orchards managed grassland and remnant bushland. (Figure 3 & 4).

Figure 3: Orchards

Figure 4: Managed Grassland

2.3 Topography

The topography of the subject site is undulating with a general 4˚ south easterly aspect.

3 Statutory Conditions

This Bushfire Hazard Assessment Report has been prepared to accompany a subdivision application to the Shire of Chittering.

This Bushfire Management Plan is aligned to the following policies and guidelines:

- Planning for Bushfire Protection Guidelines, Department for Planning and Infrastructure and Department of Fire and Emergency Services
- Australian Standards (AS) 3959-2009 Construction of buildings in bushfire prone- areas, Standards Australia
- Shire of Chittering Fire Break Notice
- Shire of Chittering Town Planning Scheme No 6
- Bush Fires Act 1954 (as amended).

4 Bushfire Hazard Assessment

4.1 Method of Assessment

There are two processes for determining the bushfire hazard level of an area. The first assessment is a broad assessment intended to be used at strategic level planning to identify the suitability of an area for the intensification of land use and to determine if the area is bushfire prone. Hazard levels are based on the prominent vegetation at the location and are identified as being either Low, Moderate or Extreme bushfire risk. The method for determining the bushfire hazard at the strategic level is aligned to the Western Australian Planning for Bushfire Protection Guidelines, 2010.

The second assessment, the Bushfire Attack Level (BAL) is a more detailed assessment of the site that is applied after the bushfire hazard and land capability assessment has been conducted. The BAL is required at the development stage to determine the potential level of construction standard as specified in *AS 3959-2009 Construction of buildings in bushfire prone areas*. Within this Plan the BAL assessment is an overview for the purpose of the Development Application and a more specific assessment prior to the construction of any buildings may be required.

4.2 Hazard Assessment – Strategic Level

The assessment of bushfire risk takes into consideration existing site conditions, which include:

- Topography with particular reference to ground slopes and accessibility;
- Vegetation cover – both remnant and likely re-vegetation;
- Relationship to surrounding development.

Based on these considerations the strategic Bushfire Hazard Assessment for Lot 300 Settlement Road is Low to Moderate. The hazard ratings for the adjoining properties are a combination of hazard ratings being Low to Moderate (Figure 5).

Figure 6.

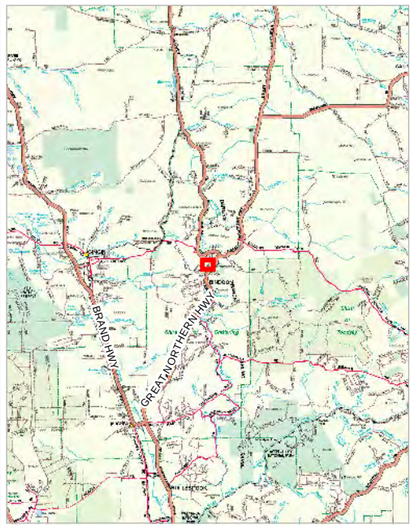
Bushfire Hazard Mapping - Strategic

Lot 300 Settlement Rd, Mooliabeenee

LEGEND

- Lot 300
- Blocks
- Low Bushfire Hazard
- Moderate Bushfire Hazard
- Extreme Bushfire Hazard

LOCALITY



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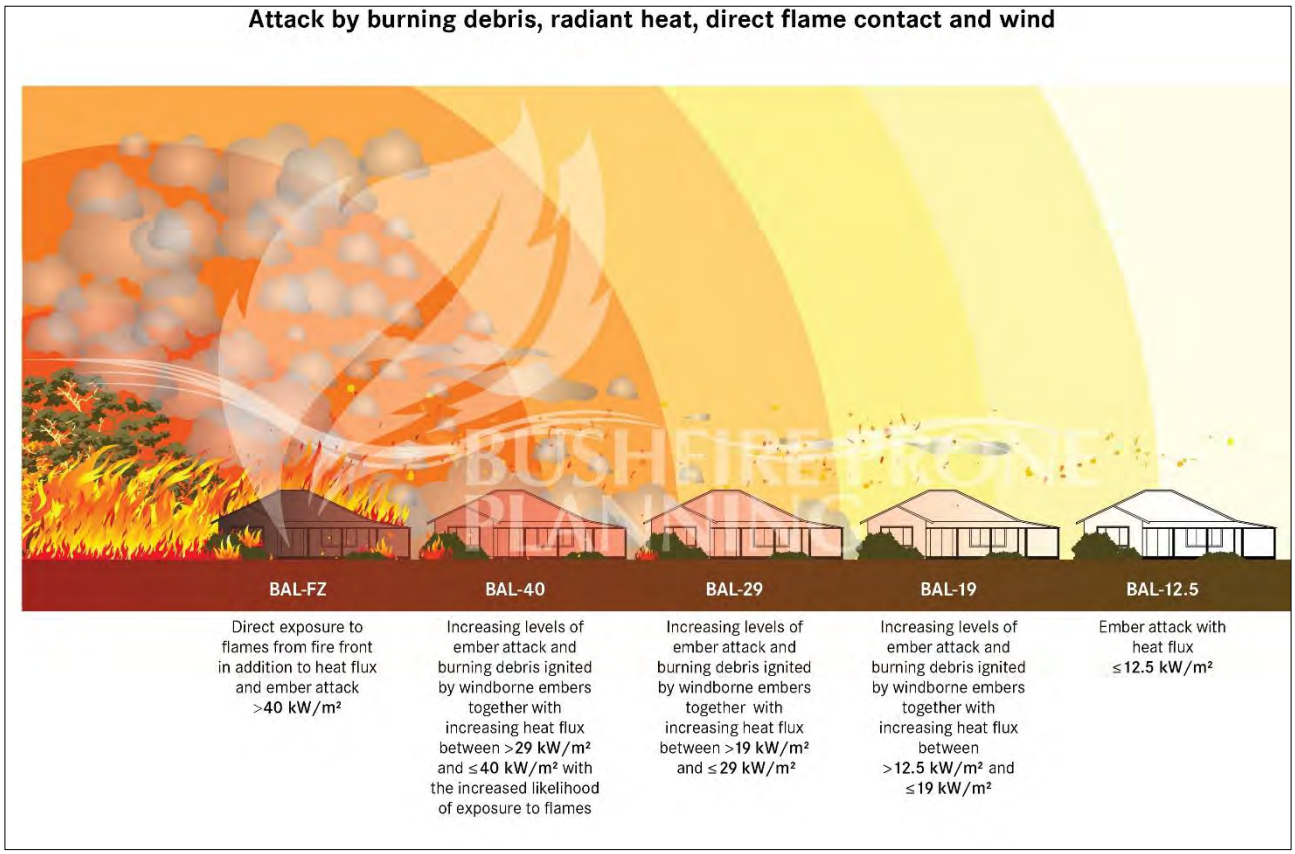
BUSHFIRE PRONE PLANNING

Date: 5/11/2014

4.3 Bushfire Attack Level (BAL)

The methodology rates bushfire attack using a combination of vegetation type, slope and distance from the building or building envelope to the predominant vegetation. In Western Australia it assumes a Forest Fire Danger Index (FFDI) of 80. The BAL assessment involves the following process in accordance with the Australian Standard- *Construction of Buildings in Bush Fire Prone Areas (AS 3959 – 2009)* (Method 1);

- Determination of the area to be assessed
- Identification of vegetation type and class
- Determination of distance of the site from classified vegetation
- Determination of average slope (under the classified vegetation)
- Determination of a BAL
- Determination of construction standards



AS 3959 – 2009 has six categories of BAL. These categories are based on heat flux exposure thresholds and are summarised in Table 1.

Table 1: Bushfire Attack Levels and Corresponding Sections for Specific Construction Requirements (AS 3959-2009).

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the site and heat flux exposure thresholds	Description of predicted bushfire attack and levels of exposure	AS 3959:2009 Construction Section
BAL- LOW	See Clause 2.2.3.2	There is insufficient risk to warrant specific construction requirements	4
BAL- 12.5	≤ 12.5 kW/m2	Ember attack	3 and 5
BAL- 19	>12.5 kW/m2 - ≤ 19 kW/m2	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 6
BAL- 29	>19 kW/m2 - ≤ 29 kW/m2	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 and 7
BAL- 40	>29 kW/m2 - ≤ 40 kW/m2	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with the increased likelihood of exposure to flames	3 and 8
BAL- FZ	>40 kW/m2	Direct exposure to flames from fire front in addition to heat flux and ember attack	3 and 9

The BAL assessment using methodology from AS 3959-2009 (Section 2.2.1, 2.2.3.2 and Table 2.4.3 of the Standards) for the proposed development area is provided in Tables 2 and 3 below.

Where there is a risk of ember attack, the lowest BAL will be 12.5.

Table 2: BAL Assessment Proposed Lot 3002, Existing Western Dwelling

Lot 3002 - VEGETATION ASSESSMENT WITHIN 100m RADIUS OF EXISTING DWELLING				
Sector	North	East	South	West
Distance (metres)	90.8	>100	>100	>100
Slope (degrees)	0	0	4.1	0
Vegetation Classification	Woodland	Managed Grassland	Managed Grassland	Managed Grassland
Site pictures From Existing Dwelling				
BAL Determination for Sector	12.5	LOW	LOW	LOW
BAL dermination (highest BAL) **BAL 12.5**				

To reduce the heat flux on the proposed subdivided Lots, the following Section (4.4 Bushfire Hazard Management) contains recommendations for the development planning and design. It is recommended that a revised BAL assessment is undertaken for any proposed new building once a location has been defined.

4.4 Bushfire Hazard Management

Bushfire Attack Level determinations are based on the ongoing management of grassland fuels to low levels by slashing or grazing by livestock and adherence to the Shire of Chittering Firebreak Notice. Neighbouring property grass fuels are currently being grazed by more than 1000 head of livestock (Figure 6).

Future dwellings are to be located in areas with the appropriate BAL and to minimize the impact on the environment. The minimum BAL will be 12.5 and the maximum BAL allowable will be BAL 29. Where the minimum BAL setback is less than 20 metres, the BPZ shall be a minimum of 20m.

Bushfire Attack Level – BAL LOW is based on insufficient bushfire risk to warrant increased bushfire resistant construction standards and a BAL LOW is achievable within the proposed subdivision. **However as an Alternative Solution, any future dwellings on the proposed Lots are to be constructed to a BAL 12.5, thus ensuring enhanced occupant protection from the impact of a bushfire. The increased level in structure are mandatory to achieve the Alternative Solution**

allowing for length of Settlement Road not meeting the Planning for Bushfire Guidelines performance Criteria.

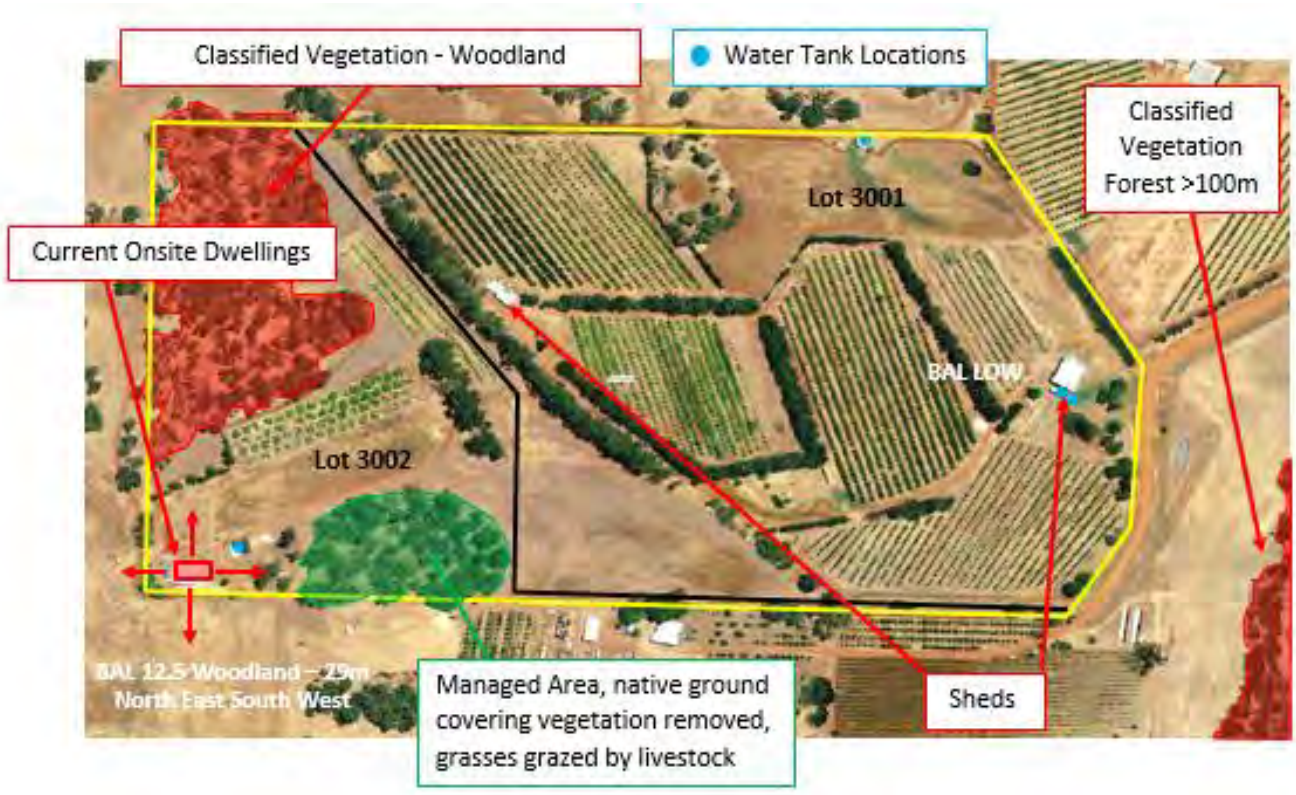


Figure 6: Subject Site Relationship to Classified Vegetation and BAL12.5 set back distances.

5 Bushfire Protection Performance Criteria

The site will be required to meet the Performance Criteria for Extreme Hazard, taking into consideration the following as per the Planning for Bushfire Protection Guidelines, 2010;

- Location (P1)
- Vehicular access (P2)
- Water (P3)
- Siting of development (P4)
- Design of development (P5)

5.1 Location (P1)

The subdivision is located in an area where the bushfire hazard level is manageable.

5.1.1 Development Location

The site sits within an Agricultural Resource Zone. The proposed lots are located in a Low to Moderate bushfire hazard. Any future construction on the site will be required to comply with the construction requirements as detailed in Table 1 and vegetation setbacks appropriate to classified vegetation within 100 metres of the proposed dwelling site.

5.2 Vehicular Access (P2)

The internal layout, design and construction of public and private vehicular access in the subdivision allows emergency and other vehicles to move through it safely at all times.

5.2.1 Two Access Routes

Site access (proposed lot 3001) is via Settlement Road 707 metres west of Great Northern Highway. Proposed lot 3002 Battle-axe Driveway will be 888 metres along Settlement Road from Great Northern Highway. Settlement Road is a formed bitumen and gravel road having a 7.5 metre wide trafficable surface between guide posts. There is provision for carrying out a three point turn at the Settlement Road termination and access to neighbouring properties.

Figure 7: Settlement Road looking south west toward the subject site

5.2.2 Public Roads

Not Applicable.

5.2.3 Cul-de-sacs

Settlement Road terminates 888.56 metres west of Great Northern Highway and does not comply with the Performance Criteria due to road length (refer Table 3 below).

An increased Bushfire Attack Level building construction standard is recommended for future onsite buildings as an **Acceptable Solution** to the non-compliant site access distance (Settlement Road). Settlement Road has a two way egress on Great Northern Highway. Settlement Road meets minimum public road requirements and with road side vegetation density and type being of a low threat nature, this also contributes to a lower bushfire threat and ease of egress in an emergency.

The construction of a cul-de-sac turnaround area as detailed in Figure 1 must meet, as a minimum, the requirements set out below. (Table 3).

Table 3: Minimum Standard for Cul-de-sacs

Standard	Public Road
Maximum length	200 meters (if emergency access is provided between cul-de-sac heads maximum length can be increased to 600 meters provided no more than 8 lots are serviced)
Minimum trafficable surface	6 metres
Horizontal clearance	6 metres
Maximum grades	1 in 8
Maximum grade over <50m	1 in 5
Maximum average grade	1 in 7
Minimum weight capacity	15 tonnes
Maximum crossfall	1 in 33
Curves minimum inner radius	12 metres
Turnaround areas	As per turn around area requirements – including 21 metre diameter head. To accommodate 3.4 fire appliance and enable them to turn around safely.

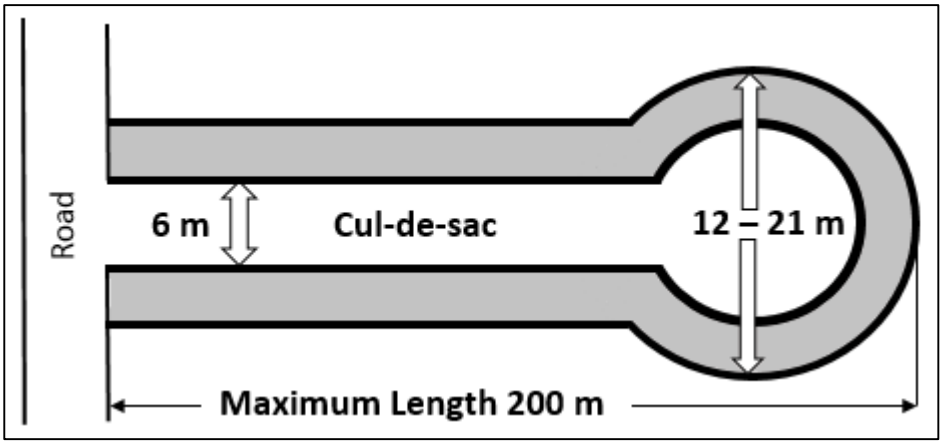


Figure 8: Cul-de-sac construction widths

5.2.4 Battle Axes

Battle axe block construction standards for the provision of access to the Lot 3002 from Settlement Road are listed in table 4 below. The battle axe will be 344 metres in length.

Table 4: Minimum Standard for Battle axe access.

Standard	Battle Axes
Maximum length	600 metres
Minimum width	6 metres
Minimum trafficable surface	4 metres
Horizontal clearance	6 metres
Vertical clearance	4 metres
Maximum grades	1 in 8
Maximum grade over <50m	1 in 5
Maximum average grade	1 in 7
Minimum weight capacity	15 tonnes
Maximum crossfall	1 in 33
Curves minimum inner radius	12 metres

5.2.5 Private Driveways

The Proposed lots 3001 and 3002 will comply with the minimum standard is detailed in Table 5.

Table 5: Minimum Standard for Private Driveway.

Standard	Private Driveway
Minimum trafficable surface	4 metres
Horizontal clearance	6 metres
Vertical clearance	4 metres
Maximum grades	1 in 8
Maximum grade over <50m	1 in 5
Maximum average grade	1 in 7
Minimum weight capacity	15 tonnes
Maximum crossfall	1 in 33
Curves minimum inner radius	12 metres
Turnaround areas:	To accommodate safe turnaround of a 3.4 firefighting appliance

5.2.6 Emergency Access Ways

Not applicable.

5.2.7 Fire Service Access Routes

Not applicable.

5.2.8 Gates

Not applicable.

5.2.9 Firebreak Widths

Proposed Lots 3001 and 3002 must comply with the Shire of Chittering Firebreak Notice.

5.2.10 Signs

Not applicable.

5.3 Water (P3)

The development is provided with a permanent and secure water supply that is sufficient for fire fighting purposes.

5.3.1 Reticulated Areas

A reticulated water supply is not available in the area of the subject site.

5.3.2 Non-Reticulated Areas

As a minimum proposed Lots 3001 and 3002 will require 10,000 litres of storage water per Lot including standard hose couplings for firefighting purposes and will be readily accessible and provide adequate water supply to fire services (Figure 9). A hardstand and turn around area suitable for a 3.4 fire appliance is required at the tank.

Proposed Lot 3001 has two 25,000 litre water tanks adjacent to the dwelling and an 80,000 litre water tank 227 metres north west from the dwelling, on the property eastern boundary. Proposed Lot 3002 has a 120,000 litre water tank adjacent to the dwelling and a 140,000 litre water tank to the north in the central bushland area.

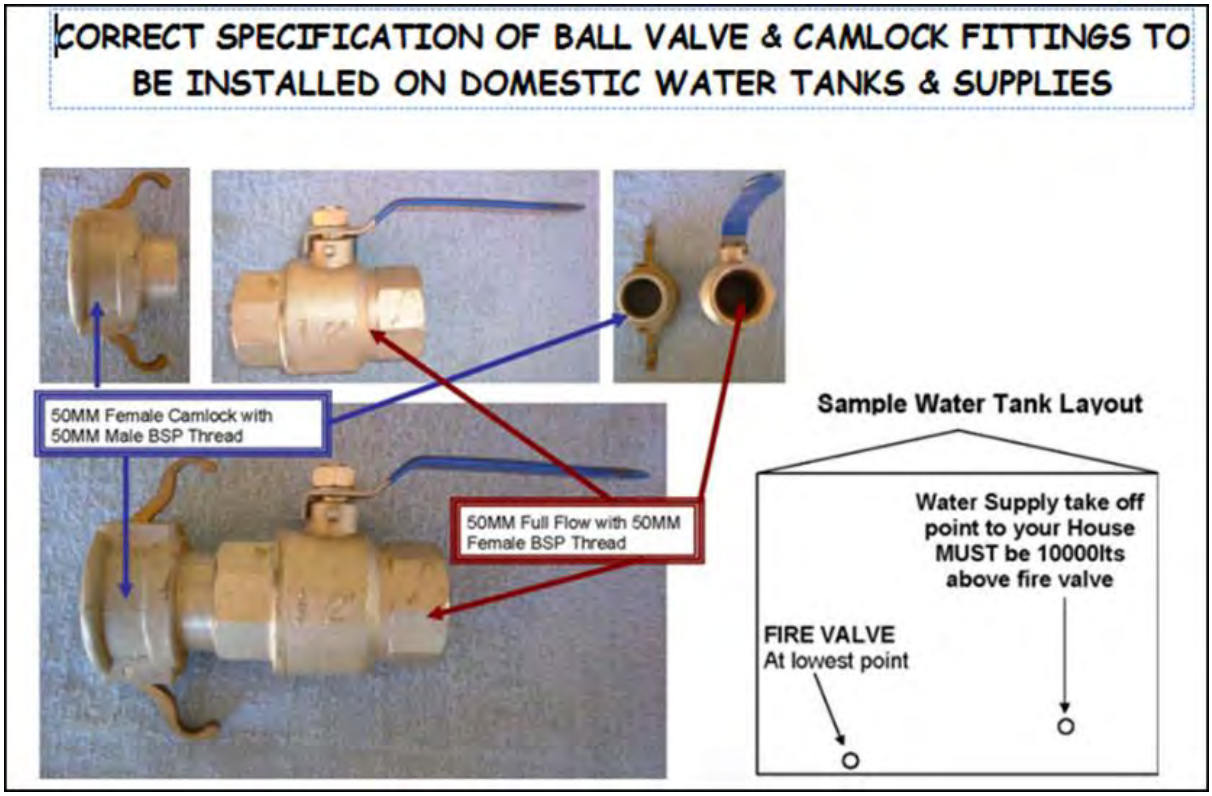


Figure 9. Tank and Fitting Specifications

5.3.3 Non-Reticulated Areas- Dams

Not applicable.

5.4 Siting of Development (P4)

The siting (including paths and landscaping) of the development minimises the bushfire risk to life and property.

5.4.1 Hazard Separation-Moderate to Extreme Bushfire Hazard Level

Refer to Section 4.4 for acceptable solution.

5.4.2 Hazard Separation-Low Bushfire Hazard Level

Refer to Section 4.4 for acceptable solution.

5.4.3 Building Protection Zone (BPZ)

A Building Protection Zone (BPZ) shall be incorporated into the design to reduce bushfire intensity close to dwellings, therefore minimising the likelihood of flame contact and radiant heat onto buildings. The BPZ standards that are recommended to be incorporated into the overall design are

provided below (and shown in Figure 10). Barriers such as driveways, lawns, ovals, orchards and pathways surrounding dwellings can form part of a BPZ.

As a minimum, the BPZ must comply with the *Planning for Bushfire Protection Guidelines*, however it is recommended that any future development comply with a BPZ as detailed below and set out in Section 4.4. In accordance with *AS 3959-2009,* as the distance from the vegetation is reduced, the construction standard must be increased. Table 2.4.3 of *AS 3959-2009* sets out this relationship between separation distances and construction standards (refer to Section 4.4 of this Plan for explanation):

- Width: The BPZ for all sub division Lots is 20 metres measured from the external walls of the building or proposed buildings (see Section 4.4).
- Fuel Load: reduced to and maintained at 2 tonnes per hectare.
- The crowns of trees are to be separated where possible to create a clear separation distance between adjoining or nearby tree crowns. The separation distance between tree crowns is not required to exceed 10 metres
- No tall shrub or tree is located within 2 metres of a building (including windows).
- There are no tree crowns overhanging the building.
- Fences and sheds within the Building Protection Zone are constructed using non-combustible materials (eg: Colorbond, iron, brick, limestone) or within 6 metres of the main structure comply with AS 3959: 2009.
- Shrubs in the Building Protection Zone are cleared of dead material within the plant.
- Tall shrubs in the Building Protection Zone are not arranged in clumps, close to buildings (ie: within 3 metres).
- Trees in the Building Protection Zone have no dead material within the plant's crown or bole, and;
- Maintain debris accumulation in areas against, under or within the buildings structure.

Figure 10. Diagram showing Hazard Separation Zones and Building Protection Zone Requirements.

5.4.4 Hazard Separation Zone (HSZ)

In line with the *Western Australian Planning for Bush fire Protection Guidelines* the following landscape design measures are recommended to provide sufficient protection to the building from radiant heat and flame contact and to reduce the likelihood of ember attack by approximately 85 percent (Leonard, 2005), to reduce the overall vulnerability of a subdivision and related development from bushfire and also assist with fire control operations. They must be provided between extreme bushfire hazards and buildings within a subdivision to create a minimum separation distance of 100 metres between the buildings and the hazard in order to provide protection from burning debris (spotting and airborne embers), radiant heat and direct flame contact. Where bushfire hazards exist within a subdivision, a separation zone should be created between these hazards and the buildings.

It is recommended that the Hazard Separation Zone (HSZ) should comply with Section A4.4 of the *Planning for Bushfire Protection Guidelines* (outlined in Figure 10). Every building and its contiguous Building Protection Zone is surrounded by a HSZ that is required to meet the following:

- Minimum width: inclusive of BPZ is 100 metres or to the boundary of the Lot from the buildings in the case of vegetation classified under Table 1, *Planning for Bushfire Protection Guidelines* and incorporating the Building Protection Zone
- Fuel load: reduced to and maintained at between 5 and 8 tonnes per hectare (jarrah/marri dominated forest)
- Trees crowns have clear separation
- Trees have no dead material within the plant's crown or on the bole

Where buildings are constructed to a Bush Fire Attack Level construction standard the Building Protection and Hazard Separation Zones may be included in the BAL setback distance as long as the BAL setback distance is equal to or greater than 20 metres.

5.4.5 Reduction in Bushfire Attack Level Due to Shielding

Not Applicable.

5.5 Design of Development (P5)

The design of the development is appropriate to the level of bush fire hazard that applies to the development site.

5.5.1 Compliant Development

It is recommended the development comply with the requirements set out in Section 5.4 to include appropriate Hazard Separation Zones and Building Protection Zones that are maintained to the requirements set out in this Section. This will ensure the bushfire hazard level is kept as low as feasible on existing and future dwellings on the site.

5.5.2 Non-Compliant Development

Not applicable.

6 Fire Fighting Service

The Shire of Chittering Fire Service supports 5 Volunteer Bushfire Brigades. The development site is within 7.5 Kilometres / 20 minute average turn out response zone from the Bindoon Volunteer Bush Fire Brigade fire station.

Fire fighter safety during fire suppression activities is taken into consideration and the BPZ and HSZ shall be maintained around surrounding buildings in respect of this.

7 Implementation and Responsibilities

The proposed development for lot 300 Settlement Road, Bindoon will be required to meet the minimum criteria as per the Western Australian Planning for Bushfire Protection guidelines, AS 3959-2009, Shire of Chittering Town Planning Scheme No 6, Shire of Chittering Firebreak Notice and other requirements as included in a full and comprehensive Bushfire Management Plan.

The design of structures and the modification to vegetation are such that with implementation of a comprehensive Bushfire Management Plan, the bushfire threat to persons and property within the development is reduced. This is subject to the owners and occupiers of the proposed development complying with their responsibilities as described in a detailed Bushfire Management Plan.

Appendix 1. Compliance Checklist for Performance Criteria and Acceptable Solutions

Element 1: Location	Compliance
Does the proposal comply with the performance criteria by applying acceptable solution A1.1?	Yes

Element 2: Vehicular Access	Compliance
Does the proposal comply with the performance criteria by applying acceptable solution A2.1?	Yes - Via Great Northern Highway Refer - 5.2.3 Cul-de-sac
Does the proposal comply with the performance criteria by applying acceptable solution A2.2?	N/a
Does the proposal comply with the performance criteria by applying acceptable solution A2.3?	Yes – Cul de sac will meet requirements (refer Section 5.2.3)
Does the proposal comply with the performance criteria by applying acceptable solution A2.4?	Yes – proposed battle axe driveway will meet requirements
Does the proposal comply with the performance criteria by applying acceptable solution A2.5?	Yes, refer 5.2.5 driveway requirements
Does the proposal comply with the performance criteria by applying acceptable solution A2.6?	N/a
Does the proposal comply with the performance criteria by applying acceptable solution A2.7?	N/a
Does the proposal comply with the performance criteria by applying acceptable solution A2.8?	N/a
Does the proposal comply with the performance criteria by applying acceptable solution A2.9?	Yes, compliance with Shire of Chittering Firebreak Notice
Does the proposal comply with the performance criteria by applying acceptable solution A2.10?	N/a

Element 3: Water	Compliance
Does the proposal comply with the performance criteria by applying acceptable solution A3.1?	N/a
Does the proposal comply with the performance criteria by applying acceptable solution A3.2?	Yes
Does the proposal comply with the performance criteria by applying acceptable solution A3.3?	N/a

Element 4: Siting of Development	Compliance
Does the proposal comply with the performance criteria by applying acceptable solution A4.1?	Yes - Refer Section 5.4.1 & 4.4.
Does the proposal comply with the performance criteria by applying acceptable solution A4.2?	Yes – on site vegetation will be managed.
Does the proposal comply with the performance criteria by applying acceptable solution A4.3?	Yes – Where achievable on site (BPZ) - refer to Section 5.4.3.
Does the proposal comply with the performance criteria by applying acceptable solution A4.4?	Yes – Where achievable on site - refer to Section 5.4.4.
Does the proposal comply with the performance criteria by applying acceptable solution A4.5?	N/a - Existing and future developments may be assessed if requested.

Element 5: Design of Development	Compliance
Does the proposal comply with the performance criteria by applying acceptable solution A5.1?	Yes – Vegetation modification will be carried out to achieve compliance.
Does the proposal comply with the performance criteria by applying acceptable solution A5.2?	Yes - Building construction standards will be increased to comply with AS 3959-2009, and appropriate on site setbacks provided where possible.

8 References

- Muller, C 2008. *Report on a Bushfire Threat Analysis for Western Australia.*
- Western Australian Planning Commission & Fire and Emergency Services Authority 2010, *Planning for bushfire protection guidelines,* edition 2, State of Western Australia.
- Shire of Chittering *Local Planning Scheme 6*
- Shire of Chittering - *Firebreak Notice 2013/14*
- Standards Australia 2009, *Australian Standard, Construction of buildings in bushfire prone areas, AS 3959-2009 (incorporating Amendment No 1, 2 and 3),* NSW Australia.

APPENDIX F

Amendment Documentation

SHIRE OF CHITTERING

Town Planning Scheme No. 6

Amendment No. XX

Lot 300 Settlement Road, Bindoon

November 2014

PLANNING AND DEVELOPMENT ACT 2005

RESOLUTION DECIDING TO AMEND A TOWN PLANNING SCHEME

SHIRE OF CHITTERING

TOWN PLANNING SCHEME NO. 6 – AMENDMENT NO. XX

RESOLVED that the Council, pursuant to Section 7 of the Planning and Development Act 2005 initiate an Amendment to Town Planning Scheme No.6 for Lot 300 Settlement Road, Bindoon by:-

1. Rezoning Lot 300 Settlement Road, Bindoon from *Agricultural Resource* to *Rural Smallholdings*.

2. Amending the Scheme Map accordingly.

Dated this _____ day of _____2014.

_____
Chief Executive Officer of the Shire of Chittering

Scheme Amendment Report

Local Government:	Shire of Chittering
Description of Town Planning Scheme:	Town Planning Scheme No. 6
Type of Scheme:	District Zoning Scheme
Amendment No.:	XX
Proposal:	Rezone Lot 300 Settlement Road, Bindoon from *Agricultural Resource* to *Rural Smallholdings*

Please refer to the attached Development Plan report.

The Development Provisions are as follows:

1. Development Plan:

This Development Plan has been endorsed by the Shire Council. Subdivision and development should generally be in accordance with this Plan.

2. Development Requirements and Lot Sizes:

In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No. 6 for the Rural Smallholdings Zone apply.

3. Building Envelopes:

Buildings, water tanks, waste disposal and a building protection zone for fire management are to be contained within a cleared area not to exceed a maximum of 2000m² without the prior approval of Council; prior to confirming a building clearing area a vegetation survey is to be undertaken to ensure no rare or endangered flora is present; buildings are to have setbacks in accordance Local Planning Policy No. 18 Setbacks, with minimum setbacks from cadastral boundaries as follows:

Road 20 metres

Rear 20 metres

Sides 15 metres

4. Fencing:

In accordance with Local Planning Policy No. 22 - Fences, the construction of a fence is permitted within the building clearing area, any previously cleared area and adjoining an authorised fire break.

5. Crossovers:

The construction of a crossover to each lot is to be in accordance with Council's specifications.

6. Potable Water:

Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire-fighting purposes and fitted with a standard Camlock valve.

7. Land Management:

The maintenance of any watercourse and fire breaks on private property is the responsibility of the owner/occupier.

8. Bores, Dams and Water Courses:

The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.

9. Fire Control:

A Fire Management Plan will be prepared and endorsed by the Shire of Chittering. Development shall accord to the requirements of the Fire Management Plan.

10. Permitted Uses:

A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.

11. Stocking Restrictions:

Stock shall be restricted to previously cleared areas. The prior approval of Council is required for the keeping of any grazing animal on a lot. If, in the opinion of Council, any lot is overgrazed or constitutes land degradation, it may order the removal of any or all stock, either temporarily or permanently until the remedial works are carried out by the landowner to render the land stable.

12. Poultry:

The keeping of poultry for domestic purposes is permitted, in accordance with the Shire's Health Local Law.

13. Non-reflective Materials:

All buildings shall be constructed with roofs of non-reflective materials.

14. Effluent Disposal:

Alternative Treatment Units (ATUs) with nutrient retention capability are required on all lots unless proven otherwise by the developer / landowner in accordance with the soil capability for the site.

15. Vendor Responsibility:

The developer/vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

PLANNING AND DEVELOPMENT ACT 2005

RESOLUTION DECIDING TO AMEND A TOWN PLANNING SCHEME

SHIRE OF CHITTERING

TOWN PLANNING SCHEME NO. 6 - AMENDMENT NO. XX

The Shire of Chittering, under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005, hereby amends the above Town Planning Scheme by:

1. Rezoning Lot 300 Settlement Road, Bindoon from *Agricultural Resource* to *Rural Smallholdings*.

2. Amending the Scheme Map accordingly.

ADOPTION

Adoption by resolution of the Shire of Chittering at the Ordinary Meeting of Council held on the 2014.

President of the Shire of Chittering

Chief Executive Officer of the Shire of Chittering

FINAL APPROVAL

Adopted for final approval by the resolution of the Shire of Chittering at the Ordinary Meeting of Council held on the _____ day of _____2014.

The common seal of the Shire of Chittering was here unto affixed by authority of a resolution of council in the presence of:

President of the Shire of Chittering

Chief Executive Officer of the Shire of Chittering

Recommended/Submitted for Final Approval

Chairperson of the Western Australian Planning Commission
or as delegated under s16 of the *Planning and Development Act 2005*

Date

Final Approval Granted

Minister of Planning

Date

landinsights
PLANNING DESIGN ENVIRONMENT

PO Box 289
Mount Lawley WA 6929

Ph: (08) 9271 8506
landinsights.com.au
admin@landinsights.com.au

Your ref:
Our ref: 972

Chief Executive Officer
Shire of Chittering
PO Box 70
BINDOON WA 6502

Dear Sir/Madam

Scheme Amendment Initiation Request and Outline Development Plan
Lot 300 Settlement Road, Bindoon

I refer to the Council decision dated 18th February 2015 in relation to the Scheme Amendment Initiation Request and Development Plan for Lot 300 Settlement Road, Bindoon ("the site") and subsequent discussions with Shire Planners over the last 6 months. We respectfully ask the Council to reconsider the request in light of the revised Development Plan attached to this letter.

The officer recommendation put forward to Council supported the initiation of the amendment and adopting the Development Plan, however the motion was lost because of the following reasons:

1. Council wishes to preserve agricultural resource
2. Battleaxe designs are not supported.

The revised plan has been prepared in conjunction with Shire Planners to address the concerns of Council. The details of the plan are described further below.

Agricultural Resource

The proposed subdivision will not result in the loss of agricultural land. The intention of the design is to retain a majority of the existing orchards on one lot to have the least amount of disruption to existing operations and to create an additional lot with the remainder of the property. The new lot will include a portion of the active and productive orchard as well as some additional productive land which can be used for agricultural production including citrus trees or grapes. The remainder of the property can be used for cattle or sheep grazing. Under the current operation the cleared portions on Proposed Lot 3002 are going to waste as there are currently no plans to plant these areas. Creating one lot with a majority of the existing

orchard and another has the potential of increasing agricultural productivity as the new lot could be used for productive agricultural purposes.

Water is available to both proposed lots. The existing house on proposed Lot 3002 uses water captured from a rainwater tank. Should a dwelling be constructed on proposed Lot 3001 a rainwater tank should be installed for domestic water consumption. A rainwater tank is located at the northern boundary of proposed Lot 3001 which is used for irrigation. A number of groundwater bores and solar pump wells are located at the eastern side of the property which can be used for irrigation purposes. Proposed Lot 3001 will include a number of groundwater bores and Proposed Lot 3002 will also include a new groundwater well.

The site has been strategically identified for *Rural Smallholding* and subdivision. The site is located within the 'North Bindoon' Rural Small Holding precinct and is identified as *Rural Smallholding* in the Local Planning Strategy. This Local Planning Strategy precinct is *described as areas located around the Bindoon townsite where there are appropriate soil types for productive hobby farms and opportunities for conservation, along important streamlines and wetlands.* It is consistent with the surrounding area which is also identified for *Rural Smallholding* to the east, south-west and north. The proposed rezoning and subdivision complies with the strategies and actions of the *Rural Smallholding* zone from the LPS as demonstrated in the following table.

OBJECTIVE	COMMENT
To maximise the productive capacity of good soils.	The proposed rezoning and subdivision will consolidate a majority of the existing orchard on one lot and will create an additional lot which will contain an active orchard and have the potential to be used for additional agricultural purposes.
To allow for rural environment around nominated service centres.	The proposed lots promote rural use and the site is located approximately 1km from the Bindoon town site.
To include stringent conditions for protection and reparation of watercourses and wetlands.	A seasonal watercourse is located on the property. The watercourse has been degraded from past agricultural use, however the proposed subdivision provides a mechanism for protection and management of the watercourse, including fencing and rehabilitation. A watercourse assessment has been undertaken and is included in the ODP report.
To provide a working rural living presentation around centres.	The site will be developed as rural small holding including rural living and some farming in close proximity to Bindoon.
To allow for eco-tourism and agro tourism and special developments appropriate to rural production.	No tourism is proposed as part of the development, but the subdivision will provide some opportunity.

OBJECTIVE	COMMENT
To allow for a range of lot sizes befitting the landform constraints with an absolute minimum lot area of 4ha.	The proposed lot sizes are well above 4ha in size and have been designed according to the landscape.
All subdivision and development shall compliment land capability analysis, protection of natural streamlines and remnant vegetation and clearly demonstrate the availability of water.	The site has been assessed by a qualified environmental consultant and natural features have been identified and mapped. The proposed subdivision has been designed to complement the natural features of the site. Water availability was addressed in the ODP report.
To minimise vehicular access to highways and regional roads.	Access will be onto Settlement Road which is a rural road.
To promote and investigate the provision of potable water supply.	Adequate water for domestic use can be collected in rainwater tanks, however the potential to provide potable water can be investigated.
To promote consolidation of existing Rural Small Holdings	The site is located within the *North Bindoon Rural Small Holding* precinct as identified in the Local Planning Strategy and is already part of a larger rural small holding area.
To require developer contributions in accordance with an adopted developer contributions scheme.	Developer contributions will be determined at a later stage.

The proposed amendment and Development Plan will also comply with the objectives of the *Rural Small Holdings* zone in the Town Planning Scheme as is shown in the table below:

OBJECTIVE	COMMENT
To preserve productive land suitable for intensive horticulture and other compatible productive rural uses in a sustainable manner	**Complies:** The purpose of rezoning is to facilitate future subdivision of the site into 2 lots. One lot will consolidate the existing orchard and another lot will create an opportunity to be used for further agricultural production.
To protect the landform and landscape values of the district against despoliation and land degradation	**Complies:** The proposed rezoning and subdivision will not lead to degradation of landscape and landform values.

Battleaxe and Access

The previous subdivision design included a 10m wide battleaxe and the revised plan (attached) has eliminated this. The revised lot layout removes the battleaxe altogether. Proposed Lot 3002 now has street frontage of 50m onto Settlement Road. This design also

places a portion of the existing orchard on Proposed Lot 3002 which provides opportunity for agricultural use on the new lot.

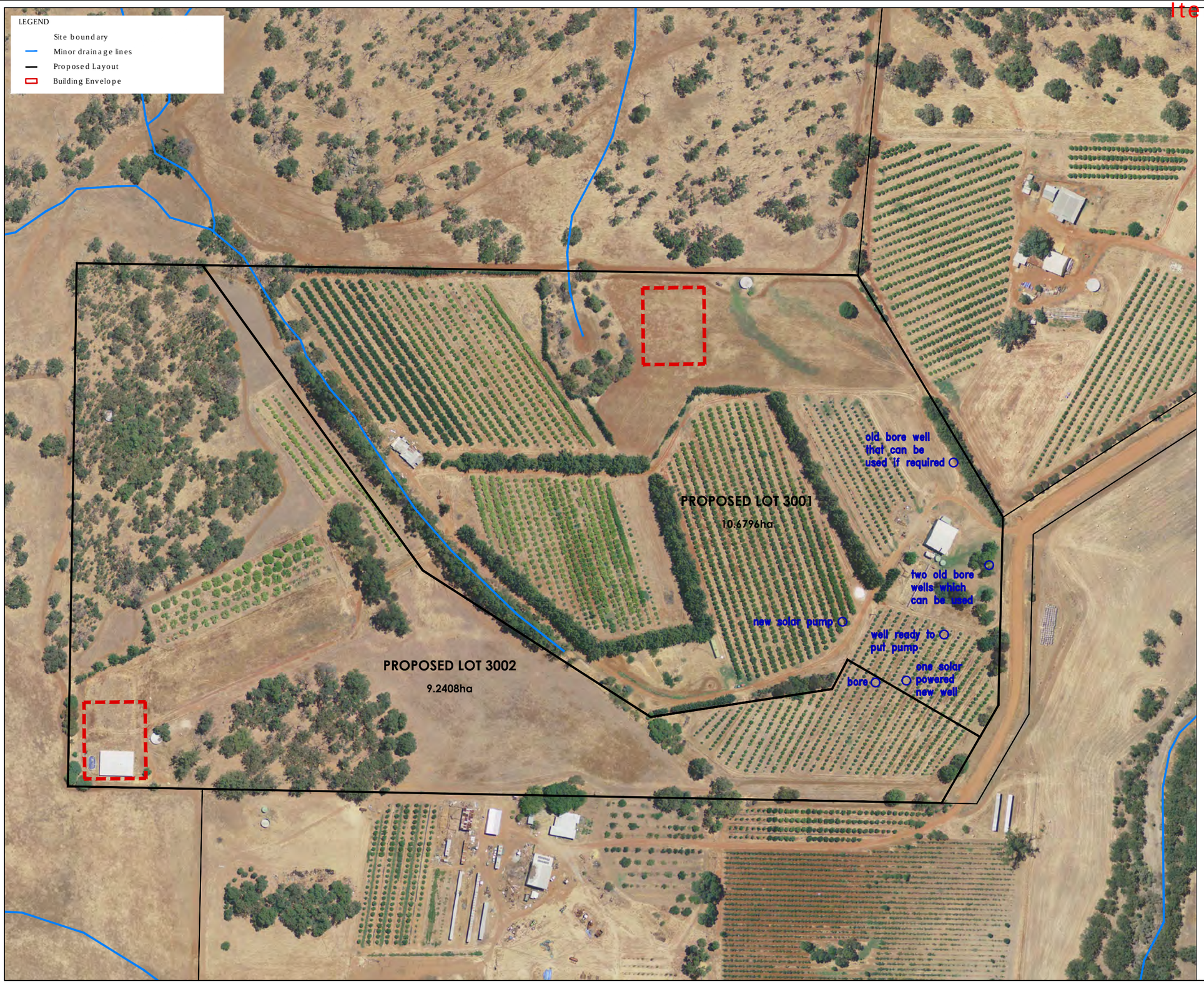
We would appreciate the opportunity to discuss the application with the Council if required so we can explain the lot design rationale in more detail and Council's concerns and queries. Please don't hesitate to contact the undersigned should you have any queries or require any further information.

Yours sincerely,

Sharee Rasmussen
Land Insights
Planning – Design – Environment

2nd October 2015

Enc: Revised Outline Development Plan



DEVELOPMENT PROVISIONS

The following development provisions apply.

1. Development Plan:

This Development Plan has been endorsed by the Shire Council. Subdivision and development should generally be in accordance with this Plan.

2. Development Requirements and Lot Sizes:

In considering development and subdivision of the land, the requirements of the Shire of Chittering Town Planning Scheme No. 6 for the Rural Residential Zone apply.

3. Building Envelopes:

Buildings, water tanks, waste disposal and a building protection zone for fire management are to be contained within a cleared area not to exceed a maximum of 2000m² without the prior approval of Council; prior to confirming a building clearing area a vegetation survey is to be undertaken to ensure no rare or endangered flora is present; buildings are to have setbacks in accordance Local Planning Policy No. 18 Setbacks, with minimum setbacks from cadastral boundaries as follows:

Road	20 metres
Rear	20 metres
Sides	15 metres

4. Fencing:

In accordance with Local Planning Policy No. 22 - Fences, the construction of a fence is permitted within the building clearing area, any previously cleared area and adjoining an authorised fire break. Where natural vegetation adjoins a road reserve, no fence is to be constructed between the road reserve and the building clearing area. Elsewhere, no boundary fences are permitted without planning consent of the Council. Where a fence crosses a strategic fire break a gate of approved design is to be provided.

5. Crossovers:

The construction of a crossover to each lot is to be in accordance with Council's specifications.

6. Potable Water:

Each dwelling is to have a water supply from roof catchment of a minimum of 120,000 litres, of which 10,000 litres is to be kept in reserve for fire-fighting purposes and fitted with a standard Camlock valve.

7. Land Management:

The maintenance of any drainage swales, easements, fire breaks and vegetation on private property is the responsibility of the owner/occupier.

8. Bores, Dams and Water Courses:

The sinking of bores, construction of dams and extraction of surface water is not permitted without the approval of the Council and relevant State Government department.

9. Bushfire Management:

A Bush Fire Management Plan in accordance with the Western Australian Planning Commission's relevant Bush Fire Risk Management policies, is to be prepared to accompany any future subdivision application, to the satisfaction of the Local Government and relevant State Authority for Fire and Emergency Services.

Land subject of this Development Plan is designated bushfire-prone for the purpose of triggering the Building Code of Australia's bushfire construction requirements. Any buildings to be erected pursuant to this Development Plan shall comply with the requirements of Australian Standard 3959 (as amended).

10. Permitted Uses:

A single house and associated outbuildings are the only permitted uses. Other uses specified in the Town Planning Scheme may be approved at the discretion of the Council. Approval is required for a home business but not for a home office. For any use that may result in degradation of land or water resources or nuisance to neighbours, a management plan may be required as a condition of development approval.

11. Stocking Restrictions:

Stock shall be restricted to previously cleared areas. The prior approval of Council is required for the keeping of any grazing animal on a lot. If, in the opinion of Council, any lot is overgrazed or constitutes land degradation, it may order the removal of any or all stock, either temporarily or permanently until the remedial works are carried out by the landowner to render the land stable.

12. Poultry:

The keeping of poultry for domestic purposes is permitted, in accordance with the Shire's Health Local Law.

13. Non-reflective Materials:

All buildings shall be constructed with roofs of non-reflective materials.

14. Effluent Disposal:

Aerobic Treatment Units (ATUs) with nutrient retention capability are required on all lots unless proven otherwise by the developer / landowner in accordance with the soil capability for the site.

15. Vendor Responsibility:

The developer/vendor shall inform prospective purchasers of the lots, in writing, of the provisions of the Council's Town Planning Scheme relating to the management of the land, as specified in the Development Plan and Fire Management Plan.

landinsights
PLANNING DESIGN ENVIRONMENT

0 50 100 Metres

NORTH

DEVELOPMENT PLAN - LOT LAYOUT (REVISED)
LOT 300 SETTLEMENT ROAD, BINDOON
SHIRE OF CHITTERING

PO BOX 289 MT LAWLEY, W.A. 6929
phone : (08) 9271 8506 fax : (08) 6161 2597 email : admin@landinsights.com.au

All dimensions and areas subject to survey

PLAN NO: 972-08 SCALE: 1:2000 (A3) DATE: October 2015

Local Planning Policy No 7

OUTBUILDINGS

TABLE OF CONTENTS

STATUTORY CONTEXT

1.0 DEFINITIONS

2.0 OBJECTIVES

3.0 POLICY STATEMENT

4.0 Schedule 1

STATUTORY CONTEXT

The Shire of Chittering, as enabled under Part 2 of *Town Planning Scheme (TPS) No 6*, hereby makes this Local Planning Policy (LPP) regarding Outbuildings.

Any Local Planning Policy prepared under this part shall be consistent with the Scheme and if any inconsistency arises the Scheme shall prevail.

An LPP is not part of the Scheme and shall not bind the Local Government in any respect of any application for Planning Approval, but the Local Government shall have due regard to the provisions of any Policy, and the objectives which the Policy is designed to achieve before making its decision.

This policy applies to all land zoned within the Shire of Chittering and supersedes Local Planning Policy No.7 (adopted 16 July 2008).

1.0 DEFINITIONS

The following are definitions that relate directly to the application of this policy:

"**Building Setback Area**" means the area of any lot between the property boundary and the building setback line, measured at right angles (90 degrees) to the boundary (Residential Design Codes)

"**Council**" mean the elected members of the Shire.

"**Lot**" has the same meaning as in the Town Planning and Development Act 1928, but does not include a strata or survey strata lot (TPS No. 6)

"**Shire**" means Shire of Chittering.

"**Residential Design Codes**" is in reference to State Planning Policy 3.1 Residential Design Codes.

"**Building Envelope**" means the area of land within a lot marked on a plan approved by the responsible authority within which all buildings and effluent disposal facilities on the lot must be contained within a defined building envelope that may be cleared for the purposes of erecting a dwelling, outbuildings and management of vegetation for gardens, car parking, driveways and fire hazard reduction (TPS No. 6)

"Attached" means that a structure is structurally joined or joined at the roof to another roof

"Carport" means a roofed structure designed to accommodate one or more motor vehicles unenclosed except to the extent that it abuts a dwelling or a property boundary on one side, and being without a door unless that door is visually permeable.

"Combined Floor Area of Outbuildings" for the purpose of this policy is the total floor area of all the outbuildings located on the subject land.

"Combined Roof Area of Outbuildings" for the purpose of this policy is the total roof area of all outbuildings located on the subject land.

"**Detached**" means that no part of a structure is joined to any part of another structure

"Earthworks" means the movement of earth on land which is carried out in conjunction with the construction of a structure or independently and exceeds 0.5m in height at any given point.

"Enclosed" means an area bound on three or more sides by a permanent wall and covered in a water impermeable material

"**Garage**" Any enclosed roofed structure, other than a carport, designed to accommodate one or more motor vehicles provided for the sole use of the dwelling and designed to be integrated with the dwelling. Garages that are included under the main roof of the residence are not subject to this policy.

"**Outbuilding/Shed**" has the same meaning given to it in the Residential Design Codes and is also a structure used for the housing/storage of machinery or household items, which may be provided with power and incorporates such structures as sheds and barns and includes detached garages, carports and outbuildings. An outbuilding also means a Class 10A building as defined by the Building Code of Australia, which Class 10 refers to a "non-habitable" building. The outbuilding does not include a water tank or animal feed bin.

"Garden Shed" means a prefabricated steel structure with a maximum floor area of 10m2, and a maximum wall height of 1.7m and a maximum ridge height of 2.1m

"Integrated" means that a garage or outbuilding is constructed of a similar roof pitch, colours, materials and design in reference to the existing dwelling's roof pitch, colours, materials and design

"Lean To" means a structure with a single sloping roof that is structurally attached to an existing building. Lean to's that are attached to an outbuilding are subject to this policy

"Scheme" means the Town Planning Scheme No. 6 as amended

"**Ridge Height**" means the maximum vertical distance between the finished floor level and the finished roof height directly above.

"Wall Height" means the maximum vertical distance between the finished floor level and the finished wall height directly above.

"**Substantially Commenced**" means the commencement of the approved development either by way of undertaking associated earthworks, construction, placement or otherwise of the approved development

Detached Patios" means unenclosed structure covered in a water impermeable material, detached from the dwelling

2.0 OBJECTIVES

The objectives of this policy are:

- *To allow for appropriate outbuildings that do not have adverse impacts on the streetscape, character, amenity or environmental attributes of the surrounding area;*
- *To ensure that outbuildings are NOT used for residential habitation;*
- *To provide flexibility in the acceptable design and siting of outbuilding that do not impact adjoining properties in varying the Residential Design Codes;*
- *To protect the natural vegetation, water quality and landscape amenity of the Shire.*

3.0 POLICY STATEMENT

This policy applies to all outbuildings, detached patios, carports and garages on private property located within the Shire of Chittering

Outbuildings

3.1 Exemptions from Planning Consent Requirements

3.1.1 Planning Approval is not required for an outbuilding with an area of 10m2 or less.

3.1.2 Planning approval is not required for an outbuilding with an area of greater than 10m2, provided that it:

a) Complies with the development specifications within this policy;

b) In rural residential and townsite zones outbuilding need to be integrated to a primary dwelling, for example, patios are classified as 10a(s) but appropriately attached to a dwelling and located at the rear of the dwelling they should not require Planning Approval.

c) It is constructed of non-reflective material, such as the product known as 'Colorbond' unless as per LPP No 19.

d) Is not located within
   i. Special Control Areas;
   ii. Rural Residential Zones;
   iii. Heritage Areas.

3.2 Design Requirements for Outbuildings

3.2.1 Dongas for storage purposes will not be permitted within the Shire of Chittering.

3.2.2 No second hand materials used.

3.2.3 Outbuildings are not placed on strategic fire breaks.

3.2.4 The construction of an outbuilding on a vacant property within the 'Townsite' or 'Rural Residential' Rural Conservation, Rural Smallholding and Rural Retreat zone is not permitted unless a Building Permit Application for a dwelling has been approved by the Local Government.

3.2.5 The siting of any outbuilding shall be in accordance with the following:

(a) Contained within any defined building envelope;

(b) Or in accordance with the setbacks prescribed by the Residential Design Codes or Town Planning Scheme No. 6 where they apply;

(c) The variation of a secondary street setback will not be approved except under

exceptional circumstances.

(d) Behind the main residential building line in accordance with Schedule 1.

3.2.6 The Local Government may exercise its discretion to vary the Residential Design Codes (as amended) by approving outbuildings in accordance with the maximum design standards (See table 1).

3.3 Cladding materials

3.3.1 Within Agricultural Resource zone , non-painted steel wall cladding will only be supported for use on outbuildings where the lot is over 40ha and where the Shire's officers are satisfied that the reflection will not cause undue impact to neighbouring properties or passing road traffic.

3.3.2 The Shire will support the use of factory applied painted steel wall and roof cladding in a colour that is sympathetic to the surroundings and colour scheme of the dwelling.

3.3.3 No second hand materials to be used.

3.3.4 Dongas and transportable structures for storage purposes are prohibited.

3.3.5 Where masonry construction is to be employed, the wall and roof colour and appearance of any outbuilding should be complementary to the design and construction of the dwelling.

3.4 Maximum Floor Areas, Wall Height and Ridge Height

Table 1 Maximum Floor Areas, Wall Height and Ridge Height

	Maximum Acceptable Design Standards		
Zoning of Property	Area	Wall Height	Ridge Height
R10/30	60m2	3.0	4.5
R2	120m2	3.5	4.5
Townsite R2.5	120m	3.5	4.5
Rural Residential	200m2	4m	5.0m
Rural Smallholding	300m2	4.5m	5.5
Rural Retreat	300m2	5.0	5.5
Agricultural Resource Up to 5 hectare	300m2	4.5	5.5
UP TO 10 hectare	300	5.0	5.5
10 hectare and above	To be assessed on individual basis	To be assessed on individual basis	To be assessed on individual basis

3.4.1 Outbuildings that do not comply with the maximum acceptable design standards, as per Table 1 are unlikely to be considered unless detailed justification can be provided for proposed variation in relation to lot configuration, topography or use.

3.4.2 Variations that are considered under exceptional circumstances will be referred to affected surrounding landowners for comment. The procedure for referring an application for planning approval is outlined by Town Planning Scheme No. 6 and the Residential Design Codes respectively. Where a submission is received objecting to a proposal for an oversized shed the application may be referred to Council for consideration.

3.4.3 Outbuildings that exceed the maximum acceptable area will generally not be supported unless in Council's opinion the size, appearance and location of the outbuilding will not have a detrimental impact on the landscape, affected surrounding landowners and amenity of the area.

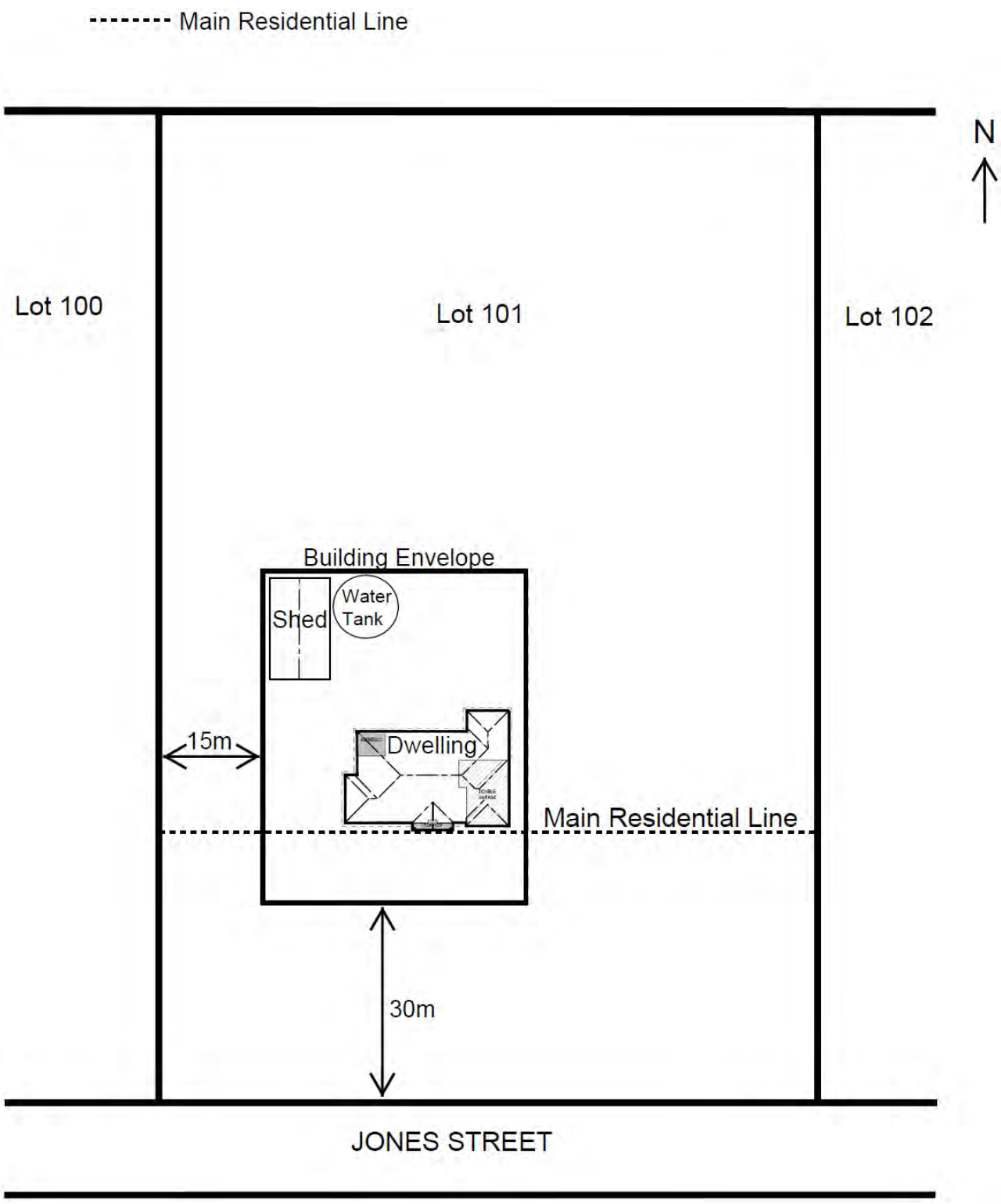
3.4.4 Unless specified in this Policy, outbuildings shall otherwise comply with the Residential Design Codes (as amended) on land where they apply.

3.4.5 The conversion of an outbuilding (class 10a) to a dwelling (class 1a) is not supported.

3.5 Living in Outbuildings

3.5.1 Living in outbuildings is prohibited.

4.0 Schedule 1: Examples of Main Residential Line



SHIRE OF CHITTERING

TOWN PLANNING SCHEME NO. 6

Local Planning Policy No. 7

OUTBUILDINGS AND SWIMMING POOLS

12 AUG 2008
Planning
18/06/0007.
E08144/.

SHIRE OF CHITTERING
LOCAL PLANNING POLICY No. 7
OUTBUILDINGS AND SWIMMING POOLS

1. STATUTORY CONTEXT

The Shire of Chittering, as enabled under Part 2 of Town Planning Scheme (TPS) No. 6, hereby makes this Local Planning Policy (LPP) regarding Outbuildings and Swimming Pools throughout the Shire of Chittering.

Any LPP prepared under this part shall be consistent with the Scheme and if any inconsistency arises the Scheme shall prevail.

An LPP is not part of the Scheme and shall not bind the Local Government in any respect of any application for Planning Approval but the Local Government shall have due regard to the provisions of any Policy and the objectives which the Policy is designed to achieve before making its decision.

This policy applies to all land zoned within the Shire of Chittering and supersedes Local Planning Policy No. 7, Outbuildings, adopted 18/07/2002. It does not apply to Tunnel Houses, which are the subject of LPP No. 9, nor to Sea Containers, which are the subject of LPP No. 29.

2. DEFINITIONS

The following are definitions that relate directly to the application of this policy:

"Building Clearing Area" means the area within a defined building envelope that may be cleared for the purposes of erecting a dwelling, outbuildings and management of vegetation for gardens, car parking, driveways and fire hazard reduction (TPS No.6).

"Building Setback Area" means the area of any lot between the property boundary and the building setback line, measured at right angles (90 degrees) to the boundary (Residential Design Codes).

"Council" means the Council of the Shire of Chittering (Local Government Act 1995).

"Lot" has the same meaning as in the Planning and Development Act 2005, but does not include a strata or survey strata lot (TPS No. 6).

"Outbuilding" means an enclosed non-habitable structure that is required to meet the standards of the Building Code of Australia and is detached from any dwelling or other building, but does not include a water tank or animal feed bin.

3. BACKGROUND

The reasons why landowners need outbuildings are many and varied. They are part of the rural scene and reflect the uses to which landowners use and enjoy their land. In the Agricultural Resource Zones the storage of machinery, produce, fertilizers and on-site workshops are commonplace and are an acceptable part of the rural lifestyle. Outbuildings in the broader rural areas also include poultry farms and rural industries permitted under the Scheme.

In Rural Residential Zones, some landholders use sheds or covered areas for rural pursuits, such as stabling for horses and growing or storing produce, accommodating uses that cannot be normally enjoyed in urban areas due to the limitations on lot size.

Larger outbuildings may also provide an opportunity for additional rainwater capture in locations where there is no scheme water provision.

In urban areas, outbuildings can be used for storage of various kinds, including vehicles and boats and as hobby workshops. Here there is the potential loss of amenity in the smaller lot subdivisions. In both rural and urban areas, there may be the impact of building mass on the landscape. In this regard the objectives of each zone or landform, the use of the land and the living environment are important considerations when dealing with applications.

In the Residential Design Codes, which apply within the Muchea, Bindoon and Wannamal Townsites, outbuildings are controlled so they do not detract from the streetscape or the visual amenity of residents or neighbouring properties. In this case, they are not to exceed 60m² in area or 10 per cent of the site area, whichever is the lesser and there are also maximum wall and ridge heights specified.

TPS No. 6 makes the following references to outbuildings:

5.8 Development Provisions – Rural Residential Zone, Rural Retreat Zone and Small Rural Holding Zone

The following general clauses will apply to the development and use of land in these rural zones.

5.8.8 Protection of Vegetation and Tree Cover

Areas of Vegetation Protection identified on the adopted Development Plan using Clause 5.8.1 of the Scheme shall not be cleared, felled or removed except where necessary in the following situations:

(c) the clearing is for the purpose of access to an approved dwelling or outbuildings;

(e) the clearing is necessary for the construction of a dwelling, outbuildings and an area of 20m width surrounding the dwelling for the purpose of bush fire protection.

6.2 Landscape Protection Areas

6.2.4 Planning Requirements

In dealing with an application for Planning Approval, the Local Government will not support:

(a) a dwelling or outbuilding on any ridgeline as may be prominently visible from any public road or which may adversely affect the aspects of neighbouring dwellings;

6.3 Water Prone Area – Ellen Brook Palusplain

6.3.3 Planning Requirements

The Local Government will impose conditions on any Planning Approval relating to-

(a) the construction and occupation of any dwelling or outbuilding;

8.2 Exempted Development

Except as otherwise provided in the Scheme, for the purposes of the Scheme the following development does not require the Planning Approval of Local Government-

(b) the erection on a lot of a single house including any extension, ancillary outbuildings and swimming pools, except where -

(i) the proposal requires the exercise of a discretion by the Local Government under the Scheme to vary the provisions of the Residential Planning Codes; or

(ii) the development will be located in a heritage area designated under the Scheme;

(iii) the proposal is located within a Rural Residential zone;

(iv) the proposal is located within Special Control Area;

(v) the proposal requires access from a un-constructed road;

(vi) the development utilises transported and transportable buildings.

This policy has been created to provide guidance for Council, land owners and developers in satisfying the outbuilding requirements of TPS No. 6.

4. OBJECTIVES

The objectives of this policy are:

To allow appropriate outbuildings with the minimum of administrative requirements;

To protect the natural vegetation, water quality and landscape amenity of the Shire;

To maintain the rural character of the Shire.

5. POLICY STATEMENT

5.1 Exemptions from Planning Consent Requirements

Planning consent is not required for:

a) above-ground swimming pools, provided they are located:
   i) within any building clearing area specified for the lot; and
   ii) outside strategic fire breaks (see also Local Planning Policy No. 21);

b) below-ground swimming pools and outbuildings constructed of Colorbond or other non-reflective materials, with an area of 10m² or less, provided they are located:
   i) within any building clearing area specified for the lot;
   ii) outside setback areas (see also Local Planning Policy No. 18);
   iii) outside strategic fire breaks (see also Local Planning Policy No. 21); and
   iv) with a minimum setback of 30m from an existing water body or highest known flood level or drainage easement;
   v) with a minimum setback of 10m from a drainage easement;
   vi) behind any dwelling ie. not between a dwelling and the road frontage.

5.2 Planning Consent Requirements for Outbuildings and In-ground Swimming Pools

a) Subject to Clause 5.3 below, planning consent is not required for outbuildings or in-ground swimming pools with an area greater than 10m² located in accordance with 5.1 b) i) to vi) unless:
   (i) the proposal requires the exercise of a discretion by the Local Government under the Scheme to vary the provisions of the Residential Planning Codes;
   (ii) the development will be located in a heritage area designated under the Scheme;

(iii) the proposal is located within a Rural Residential zone;
(iv) the proposal is located within a Special Control Area;
(v) the proposal requires access from a un-constructed road; or
(vi) the development utilises transported and transportable buildings,
in which case the application may be dealt with by the Chief Executive Officer under delegation issued by Council in accordance with Section 5.42 of the Local Government Act;

b) Outbuildings appurtenant to a dwelling will not be approved on vacant Townsite or Rural Residential properties unless a simultaneous Building Licence Application for a dwelling has been lodged with the Local Government.

c) The Local Government may exercise its discretion to vary the Residential Design Codes by approving outbuildings up to the maximum size of 150m², irrespective of the Residential Design Codes density restrictions.

d) All outbuildings are to be placed behind the main residential building line.

e) Planning consent is not required for outbuildings not specified in part a) of this clause and otherwise in accordance with the Scheme and all Local Planning Policies.

Note: *If uncertain as to whether a planning consent is required, please contact the Shire's Planning Department.*

5.3 Building Licence Requirements for Outbuildings and Swimming Pools

a) All outbuildings and swimming pools, both above and in-ground, including those exempted from planning requirements, require a building licence;
b) Sheds with a floor area greater than 100m² require an engineer's certificate to accompany the building licence application.

ADOPTED FOR PRELIMINARY APPROVAL by resolution of the **Shire of Chittering** at the Ordinary Meeting of the Council held on the 21st day of May 2008.

ADOPTED FOR FINAL APPROVAL by resolution of the **Shire of Chittering** at the Ordinary Meeting of the Council held on the 16th day of July 2008.

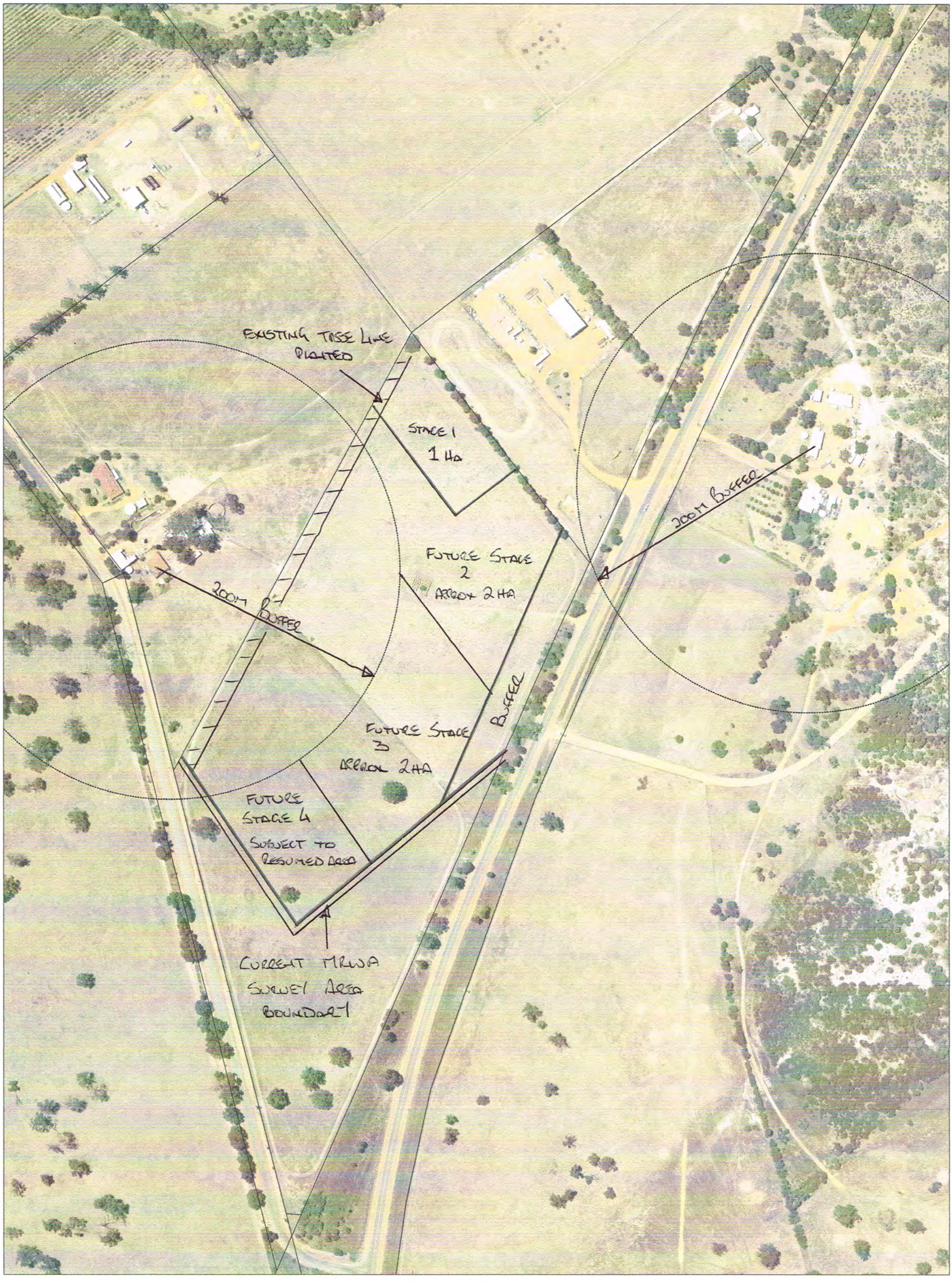
and the seal of the Municipality was pursuant to that resolution hereunto affixed in the presence of:

PRESIDENT.....

CHIEF EXECUTIVE OFFICER.....

Date: 11/8/2008

Attachment 1 - Locality Plan



© LAND INSIGHTS.
THIS PLAN CANNOT BE USED WITHOUT PERMISSION OF LAND INSIGHTS.
Note: All boundaries subject to survey.

NORTH

DSY Engineering
Lt 3 (3907) Gt Northern Highway
CHITTERING WA 6084
P: 08 9571 4026
E: info@dsyengineering.com.au

Shire of Chittering

PO Box 70

BINDOON WA 6502

Dear Sir/Madam

Proposed Transport Depot and Hardstand

Lot 7 Old Gingin Road Muchea

Introduction

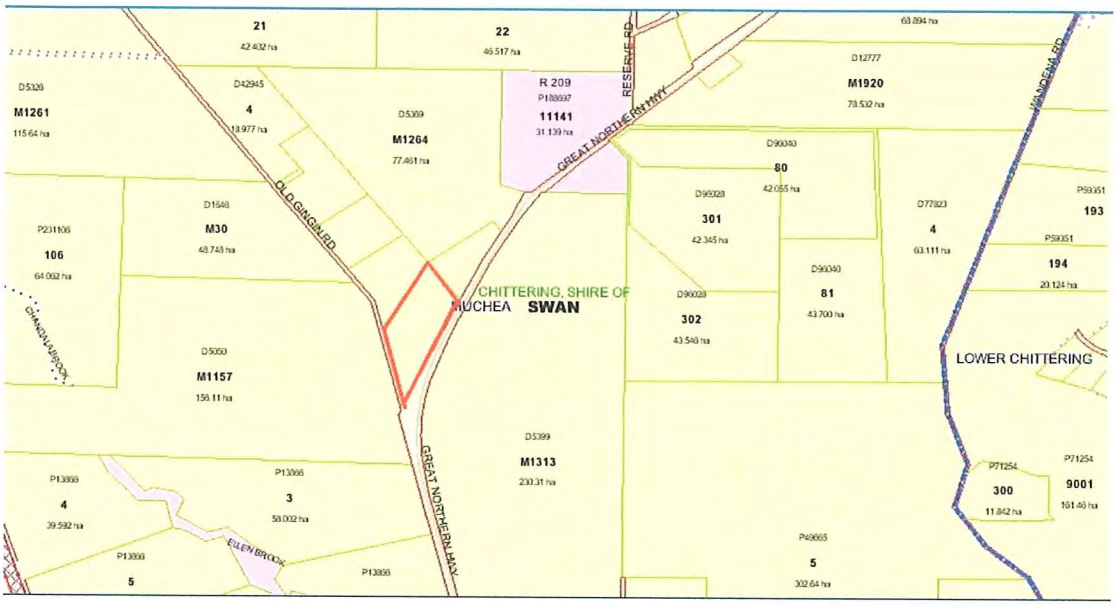
DSY Engineering seeks Planning Approval for a "Transport Depot" and hardstand on Lot 7 Old Gingin Road Muchea. Further information on the proposed use and compliance with the Shire's Town Planning Scheme is provided below. Signed application forms and relevant plans are attached to this correspondence.

The site

The application applies to Lot 7 Old Gingin Road, Muchea (the site). The total site area is 13.226ha. The details on the Certificate of Title are as follows.

Lot number	Volume/Folio	Diagram	Owner
7	1345/256	42945	Shawn Douglas Graham and Sharon Michele Crawford

Lot 7 is currently undeveloped. Surrounding land uses comprise Future Light Industrial, Agriculture, Rural Industry and Transport Depot. The site is located approximately 2.5-3km north-east of the Muchea town site, and is currently zoned *Agricultural Resource*.



Lot 7 Old Gingin Road, Muchea – Site Location

The Proposal

The proposal seeks to develop a Transport Depot and 1 hectare of hardstand.

The improvements to be made on the site are shown on the plans at Attachment 2 and include:

- Site Layout
- Proposed Development
- Site Drainage Arrangement
- Site Context and Environment

A 200m buffer from the nearest house (located to the west of Lot 7) has been incorporated into the plan. The hardstand area proposed is approximately 1 hectare including room for turning. An existing drainage basin is shown at the south west corner of Lot 3. Water will be directed along existing drainage channels to this basin to prevent water runoff to surrounding properties.

Access

Access currently exists for Lot 3 off the Great Northern Highway. Lot 7 will utilise the same access point as Lot 3. This has been discussed and approved by Main Roads subject to a cap on movements. The existing Lot 3 and proposed Lot 7 transport depot movements will be well within current approvals of 10 heavy vehicle movements per day as per attached letter from MRWA.

Vehicles Parked

It is envisaged approximately 4 prime movers and 8 trailers will be parked on Lot 7.
The vehicles will be mainly stored and parked up. Any movements will generally be in daylight hours.

Policy and Statutory Framework

Shire of Chittering Town Planning Scheme No. 6 (TPS)

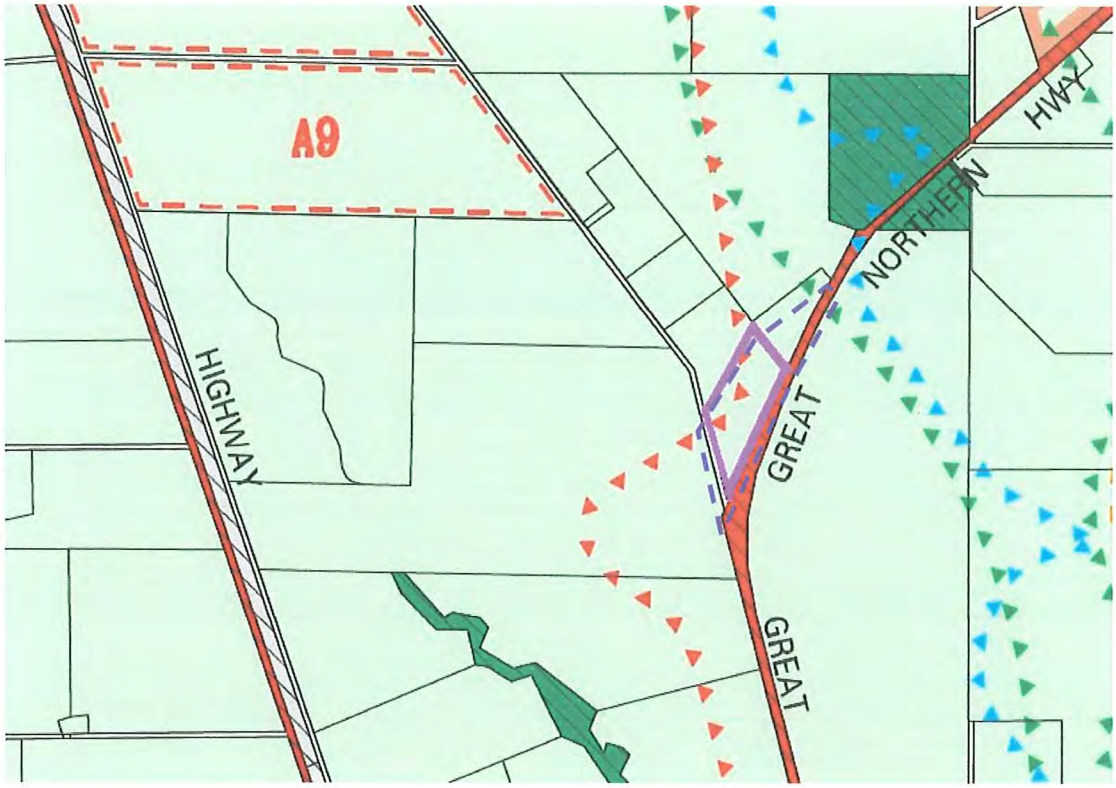
A Transport Depot is defined in the TPS as *premises used for the garaging of two (2) or more motor vehicles, used or intended to be used for carrying of goods or persons for hire or reward, or for the transfer of goods or persons, and includes maintenance and repair of the vehicles, used but not for other vehicles.*

The site is zoned *Agricultural Resource* in the Shire of Chittering Town Planning Scheme No. 6 (TPS). The use being applied for is *Transport Depot* which is an 'A' use in this zone. This means that the use requires Council approval and needs to be advertised.

The Scheme also indicates that the site is located within the *Military Considerations* Special Control Area (SCA). The purpose of this SCA is largely to protect residential development from noise impacts and to protect the integrity of the RAAF Air Base Pearce operations. It is not

considered that the land use of a transport depot will be adversely impacted by noise from the air base operations or that that transport deport will affect the operations of the air base.

The site is shown on the Scheme map below.



Lot 7 Old Gingin Road, Muchea – Scheme Map

The Scheme contains general provisions relating the *Agricultural Protection* zone. These are addressed in the following table.

Objective	**Comment**
To preserve productive land suitable for grazing, cropping and intensive horticulture and other compatible productive rural uses in a sustainable manner.	Lot 7 has been used for agriculture in the past however it is ideally located at an ideal junction for industry type use.
To protect the landform and landscape values of the district against despoliation and land degradation.	The site is almost completely flat and doesn't have any significant landscape features. It has also been mostly cleared. The proposed transport

Objective	Comment
	depot is not expected to have a significant impact on landform and landscape values. New Vegetation screening is already in place along the northern boundary of Lot 7 to reduce views into the site. This screening is in line with Landcare recommendations.
To encourage intensive agriculture and associated tourist facilities, where appropriate.	The property is not being used for horticulture; therefore the proposal will not result in a reduction in this land use.
To allow for the extraction of basic raw materials where it is environmentally and socially acceptable.	The proposal doesn't propose the extraction of basic raw materials.

Environment and Drainage

Lot 7 is largely cleared of vegetation apart from a few scattered trees and a row of trees along the road and on the northern and western boundary of the site. The proposed development will not result in the removal of any trees and will have minimal environmental impact in terms of protection of vegetation, habitat and biodiversity. A new 10m Strip of revegetation has been planted along the western boundary already.

The plans at Attachment 2 show that an existing drainage sump on Lot 3 will be used and all drainage will be directed into there. This is to ensure that water does not drain onto surrounding properties and enter nearby wetlands and watercourses. The land slopes gently from north to south by approximately 10mAHD across the site.

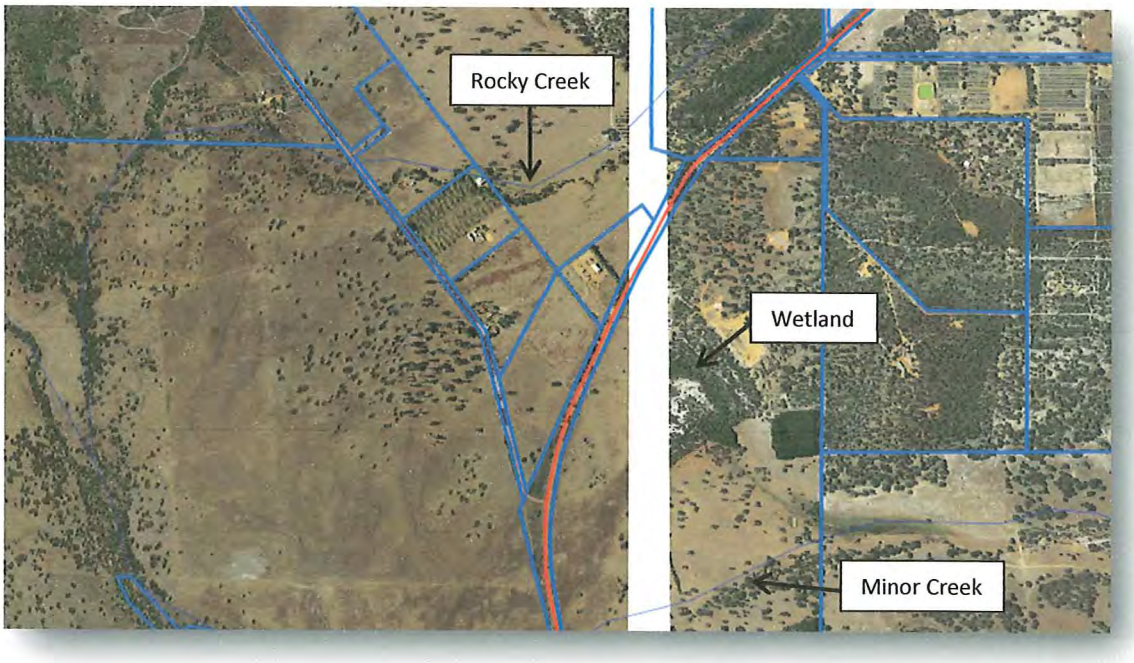
There are no natural water features on the site such as wetlands or watercourses, although the Department of Environment Regulation Geomorphic Wetlands Swan Coastal Plain dataset shows a *Multiple Use* wetland across the site. This classification is the lowest management category and is defined as *wetlands with few remaining important attributes and functions.* The degraded nature of this wetland means that development will generally not have a significant impact on the function of the wetland. EPA Guidance Statement 33 recommends that for Multiple Use wetlands that *all reasonable measures are taken to retain the wetland's hydrological functions (including on site water infiltration and flood detention).*

Lot 7 has already been cleared and used for agriculture and therefore the wetland's hydrological functions have already been significantly modified. The application includes measures to retain water onsite and to drain into a detention basin to protect surrounding waterways and wetlands in accordance with the Guidance Statement.

Two watercourses exist on either side of the site. The watercourse to the north is named Rocky Creek. It does not pass through the site and therefore will not be directly affected by the proposed development. Another minor watercourse runs to the south of the site which is across the Great Northern Highway.

A wetland is located on the property to the south of the Great Northern Highway. This wetland is listed in the Geomorphic Wetlands Swan Coastal Plain dataset as a *Sumpland*. The management category is *Resource Enhancement* which are *wetlands which may have been partially modified but still support substantial ecological attributes and functions*. The wetland and watercourse to the south of the site will not be directly impacted from the development and all water will be directed into the drainage basin so that water runoff does not leave the site.

The surrounding water features are shown in the plan below and Figure 4 at Attachment 2.



Lot 7 Old Gingin Road, Muchea – Surrounding Water Features

Conclusion

It is respectfully requested that the Shire of Chittering consider this request for an Additional Use of a *Transport Depot* on Lot 7 Old Gingin Road, Muchea.

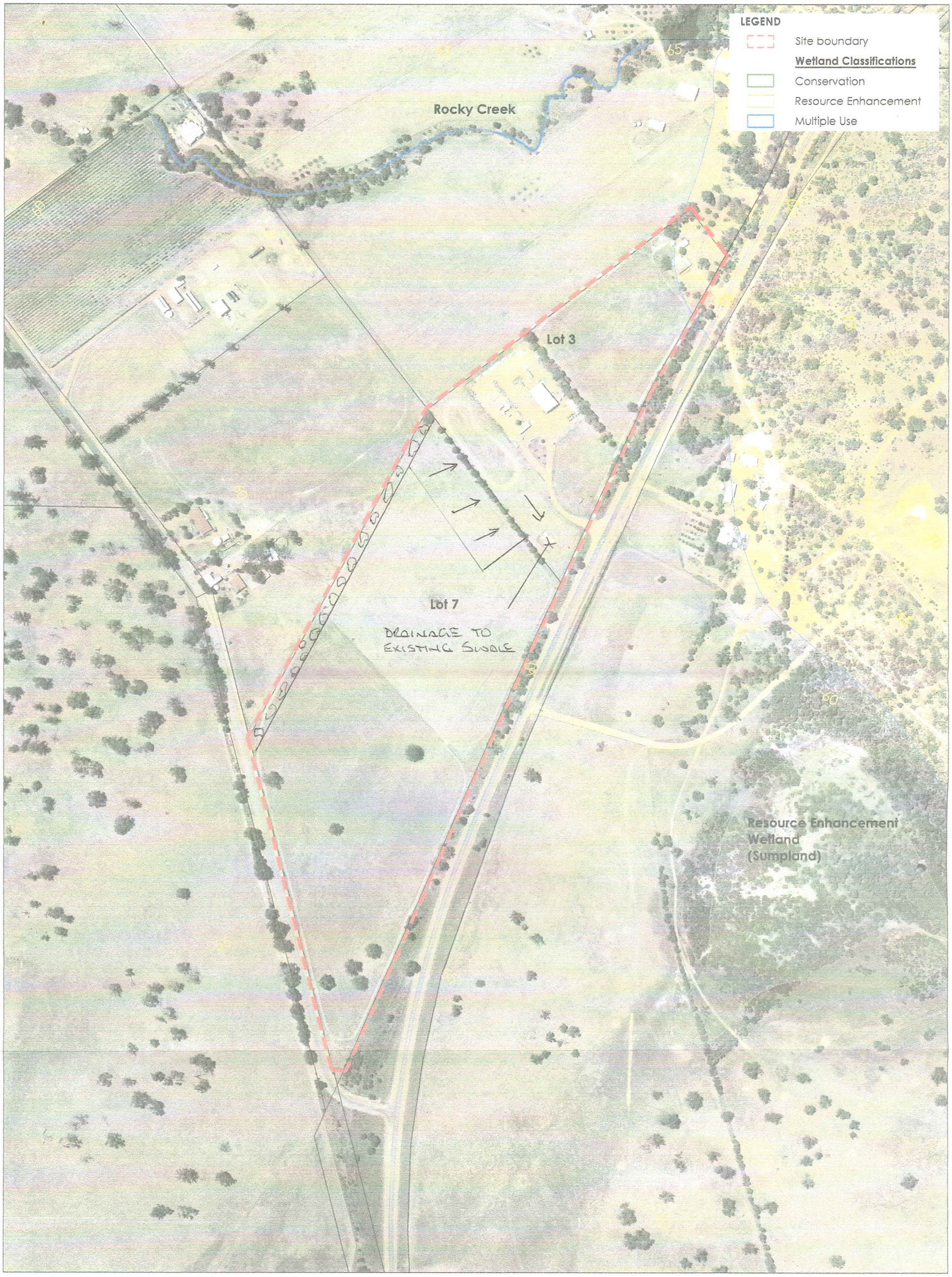
Should you have any queries regarding the application, please don't hesitate to contact the undersigned.

Yours sincerely,

Shawn Graham
DSY Engineering
Managing Director
9 June 2015

Enc:

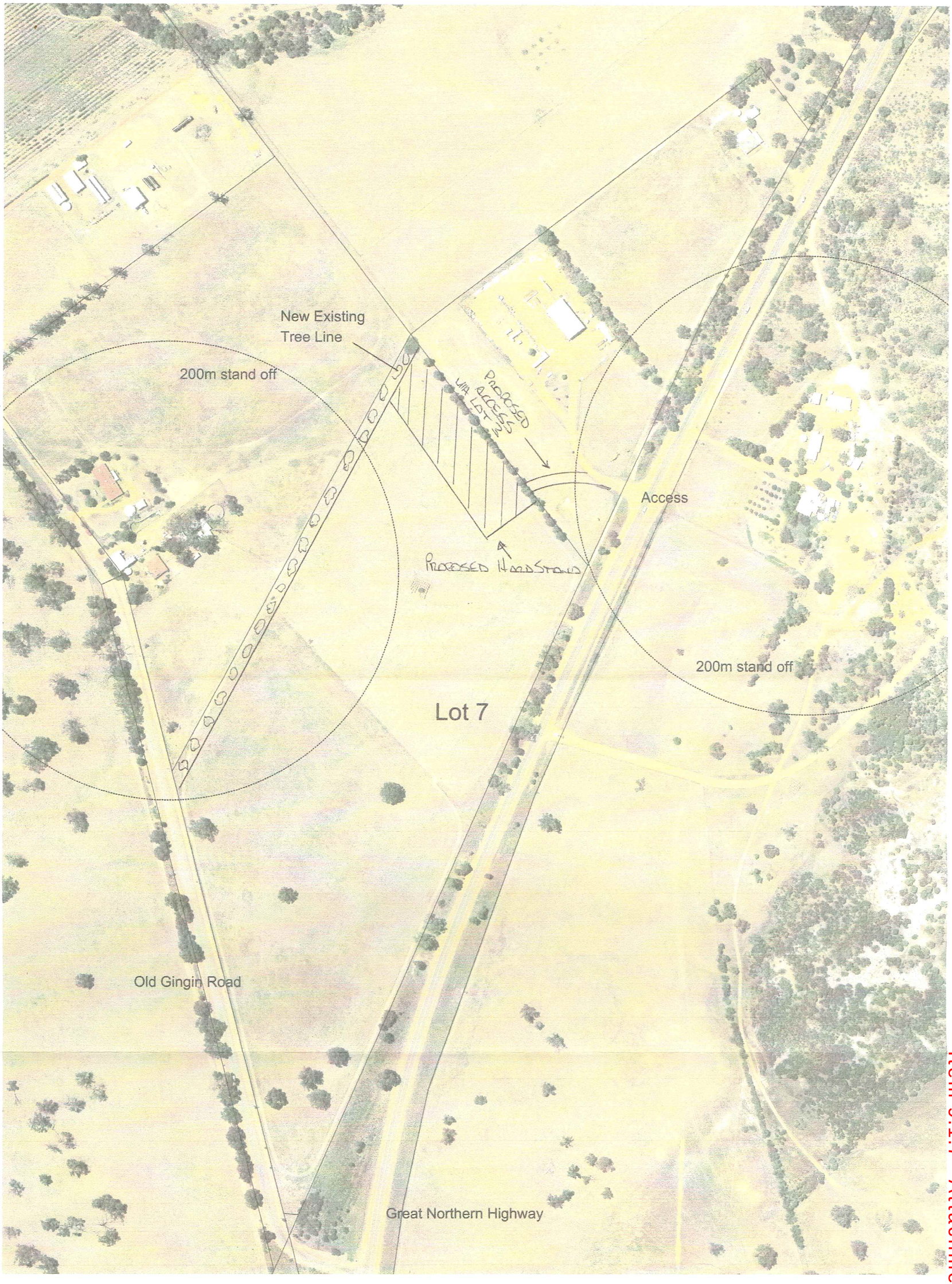
1. Application Forms
2. Plans
3. Certificate of Title
4. MRWA Letter of Approval



DRAINAGE AND ENVIRONMENTAL

NORTH

SITE CONTEXT
Lot 7 Old Gingin Road; ~~Lot 3 GT Northern Highway~~
~~BINDOON~~



Lot 7 Great Northern Highway

PROPOSED DEVELOPMENT

SITE LAYOUT

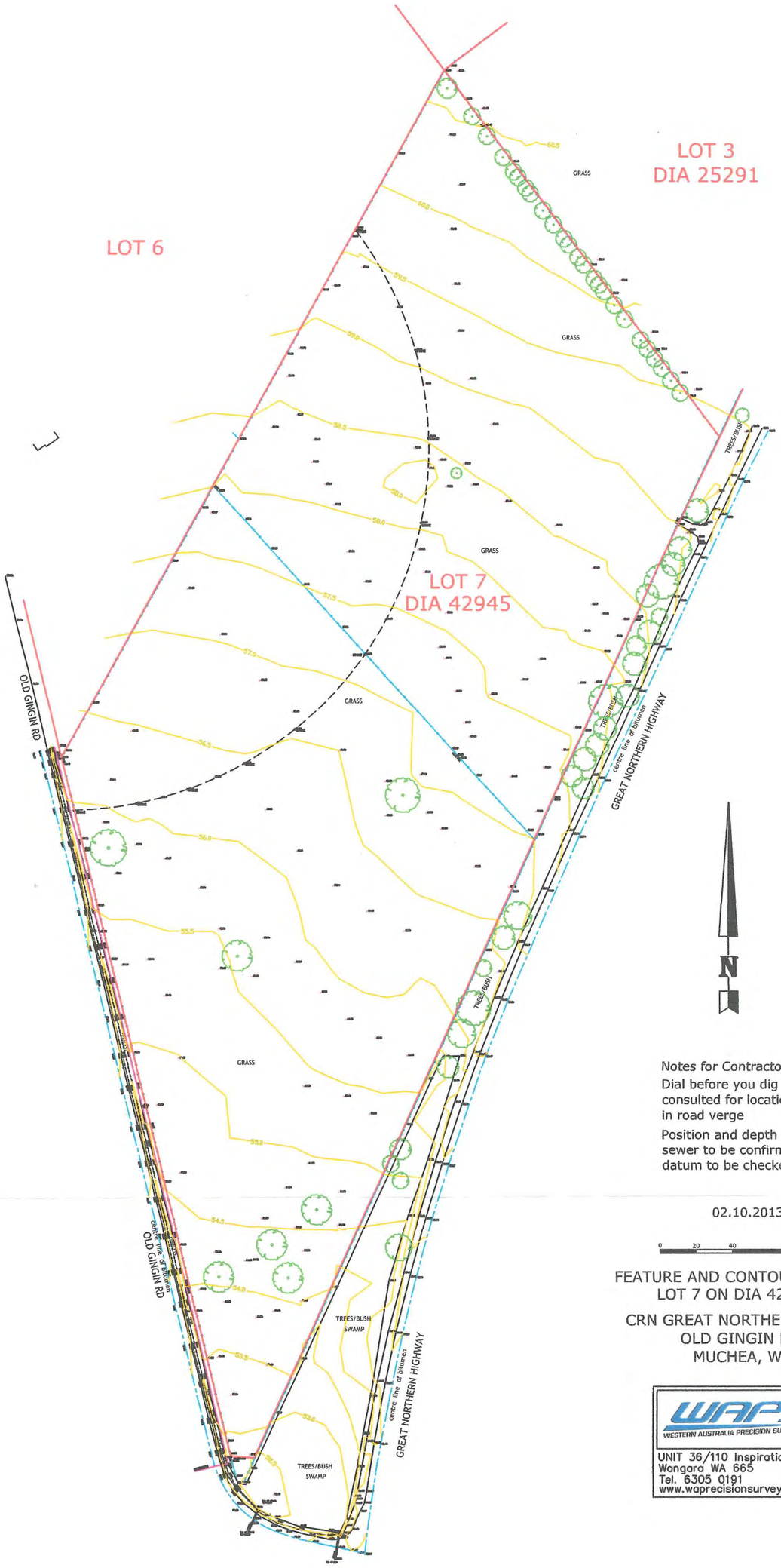
Lot 7 Great Northern Highway

PT M 1264

LOT 3
DIA 25291

LOT 6

LOT 7
DIA 42945



Notes for Contractor:

Dial before you dig to be consulted for location of services in road verge

Position and depth of water & sewer to be confirmed on site, datum to be checked

02.10.2013

0 20 40 100

FEATURE AND CONTOUR SURVEY
LOT 7 ON DIA 42945

CRN GREAT NORTHERN HWY &
OLD GINGIN RD,
MUCHEA, WA

WAPS
WESTERN AUSTRALIA PRECISION SURVEYS
UNIT 36/110 Inspiration Drive
Wangara WA 665
Tel. 6305 0191
www.waprecisionsurveys.com.au

Agency Submissions			
Submitter	**Comment**	**Proponent Response**	**Shire Officer Response**
Main Roads WA	• MRWA refers to its meeting of the 20 October 2014 with the applicant, of Lot 3 with Shane Love (MLA), Norm Fox (Project Director, MRWA) and Craig Manton (Regional Manager-Wheat belt Region) to discuss the change of use application to "transport depot" for Lot 3 through the shire planning process. We wish to state that MRWA letter dated 7/11/2014 as attached along with the application outline the outcome of this meeting. We confirm that the issues relating to Lot 7 were never discussed during the meeting and therefore any likely impacts of Lot 7 are to be discussed separately. • MRWA supports this application with the following conditions: • MRWA reiterates that the existing access to Lot 3 needs to be designed and constructed as already advised by MRWA to accommodate lane correct access by the maximum sized vehicle that is currently accessing Lot 3 and the total vehicle movements should not exceed the agreed quantity of 10 vehicle movements per day as per out letters dated 7/11/2014. • That the existing intersection of Lot 3 and Great Northern Highway be upgraded as outlined in our letter dated 7/11/2014 at the applicant's cost prior to the transport depot use commencing. • MRWA will not approve any additional direct access to and from the development (Lot 3 and 7) on to Great Northern Highway.	• Noted • Waiting for response in regards to future access subject to PDNH. • Noted • Driveway Upgrade quoted and in progress shortly. • Waiting for response in regards to future access subject to PDNH.	• Noted previous comments relating to adjoining Lot 3 access arrangements. • Support noted. • Upgrade of access and restriction of access movements noted. This is noted in the Officer's Recommendation. • Upgrade noted and included in the Officer's Recommendation. • Noted.
Public Submissions			
Submitter	**Comment**	**Proponent Response**	**Shire Officer Response**
A	• We are writing to oppose a truck depot on Lot 7 Old Gingin Road, Muchea. • Already the applicant is using Lot 3 Great Northern Hwy as a depot for transportable house (Donger's)	• Noted	• Objection noted. • This is noted and is being dealt with as a

	• We would want to know who would be policing them, so that they can only have 4 prime movers and eight trailers on the property. • As it stands we already have a truck depot in Old Gingin Road. • Also when the roundabout comes for the new Darwin Hwy, which is not far from the corner of Old Gingin Road, will they want access to this depot from Old Gingin road? • This area has gone from peaceful country area to a noisy Industrial Area. Don't the old residents of this street have any rights? • To me this is so unfair.	• Noted • Agreed and Sand trucks utilising Old Gingin Road. • MRWA have stated that this is likely to happen subject to final design for PDNH. This is not in our control. • Existing heavy noise exists from Great Northern Highway and Sand Trucks on Old Gingin Rd. • Lot 7 Noise will be far less than standard traffic noise from Highway and Old Gingin Rd. • We have planted 2000 trees to reduce noise and visual impact already.	compliance matter. • The Shire and Main Roads WA would monitor movements. • Noted. • Future access arrangements due to highway upgrades will be the responsibility of Main Roads WA. Currently these possible changes to access are not formalised. • Noted nuisances of industrial type uses in the area. The proposed development can be considered by Council in light of legislative requirements and submissions received. • Noted.
B	• Our views remain the same 13 August 2013 • We are bitterly disappointed that a proposal has been submitted which, if approved, will immensely devalue our property and also introduce a significant change in the use of our property. This is a family property, which has horses and pets for our four children, and has always provided safety and solitude within this area. • We would be faced with noise and diesel engines idling down for approximately 15-20 minutes per vehicle 24 hours a day. Tri axle		• Noted. • Concern of devaluation noted. Property devaluation as a result of development is not a planning consideration. Impact on use and safety of property is a planning

	units would be parked in different areas, resulting in oils and fuels being leaked from prime movers and various other machinery, as well as dust from a gravel surface. No noise containment, dust or lighting barriers would create an intrusion to our property, with start-ups and 15-18 gear changes per unit, as the vehicles arrive and depart. • The proposed changes would occur on a notorious bend on the highway, with average vision and a turn into Old Gingin Road, all 200 metres from our home. When we purchased this property, we believed that we had the privilege of urban use and a buffer to the highway regarding noise pollution and safety for our children whilst they are riding horses etc. • We now understand that approximately twenty prime movers and thirty dual or tri axle trailers would use this area daily if approved, as well as six light vehicles. This may create 60-70 movements 24 hours a day on opening, with plans to increase capacity. We note also that the truckers have no provision for toilet facilities. Please note that our horse stables are approximately 150 metres from the buffer zone at the closest point to the boundary. • We are firmly against this proposal, and will be seeking legal advice if plans for the transport depot proceed.		matter. • Impact of noise noted. All landowners and developments must comply with the relevant Noise Regulations. • Main Roads WA have supported the proposed access. Future access changes would be subject to Main Roads approval. • The Applicant proposes a maximum 10 movements per day. Main Roads WA have advised this as a condition of their support. The Officer's Recommendation reflects this. • Strong objection noted.

*Note: Comments are as per original submission received by the Shire. Submission comments have not been edited unless for the purposes of confidentiality where necessary.

Catchment Management Plan

Lot 3 Great Northern Highway, Muchea

This document has been prepared by the Chittering Landcare Centre using the best available data.
No responsibility is taken for use of the information for any other purpose than the express purpose identified in this document as a catchment management plan for Lot 3 Great Northern Highway, Muchea.

Executive Summary

Chittering Landcare Centre has been commissioned to write a catchment management plan for Shawn Graham and Sharon Crawford and as part of the conditions for development of a proposed transport depot for Lot 3 Great Northern Highway, Muchea.

The scope of work for this document has included

- A desktop review of all available site information
- An assessment of the constraints and opportunities of the site
- Identification of the impacts of the development on the catchment of Rocky Creek
- Monitoring of the ground water level on site
- Surveying of site to one metre contour
- Recommendations for management of site.
- Sampling Analysis Plan for ongoing monitoring
- Revegetation plan

The site is situated in the Ellen Brook palusplain special control area of the Shire of Chittering District Planning Scheme 6. It has Yanga and Yal Yal soil types which are susceptible to phosphorous export.

Development on this site requires planning approval from council and consideration of the impacts of the development on the catchment of the Ellen Brook.

Recommendations

- Hardstand area to drain to a pond which will empty to a swale drain on the south eastern side of the property. The separation pond will require capacity for 1:10 year flood from the hardstand area
- Baseline monitoring results from piezometers to be obtained before fill is placed on Lot 3.
- Depth to water table to be assessed at each monitoring interval. Assessment is of the surficial aquifer.
- Monitoring of piezometers to conducted once annually in October and the reports forwarded to the Chittering Council. Water samples taken will be assessed by a qualified laboratory for the following substances - Nutrients (TP, TKN, nitrate and ammonia).
  The following Inorganic parameters (EC, pH, TDS) (EC (salinity), pH (acidity),TDS (total dissolved solids) can be tested at the Chittering Landcare Centre.
  The original sample will provide a baseline against which all other water samples may be measured.
- Revegetation
  A comprehensive revegetation plan as recommended by the Shire of Chittering Land Capability Study for the SC 2 Precinct is recommended. This will also provide visual barriers from Great Northern Highway and nearby residences.

Statutory Environment

Lots 3 and 7 Great Northern Highway, Muchea encompass a land area of 18.89 hectares.

The property is currently zoned Agricultural Resource in the Shire of Chittering Town Planning Scheme 6 and is within the Special Control Water Prone Area - Ellen Brook Palusplain.

The purpose of the special control area is to manage development where there is a high risk of inundation so as to protect people and property from undue damage and where there is a potential risk to human health. It is also to preclude development which may increase nutrients entering the surface and sub service water systems and to ensure that wetland environmental values and ecological integrity are preserved and maintained.

The area is listed in the Shire of Chittering Land Capability and Management Study as Precinct SC2 Ellen Brook Central Plain - Chandala and Muchea Drainage Areas.
The soil types are Yanga and Yal Yal (Ya4-c and Yy1) and are susceptible to phosphorous export.

The site slopes to the east away from the Rocky Creek. Fall across the land is less than 30 cms and drains are required to direct water to specific points. In severe rainfall events storm water runs south before entering Lot 7 and flowing towards the west.

Lot 3 Great Northern Highway Muchea - Contour lines

Location and Ownership of Land

Located approximately one kilometre north of the Brand Highway/Great Northern Highway intersection the parcel of land is owned by Shawn Graham and Sharon Crawford. Bounded by the Great Northern on the east side and partially by Old Gingin Road on the west side the property is a typical palusplain lot, having been extensively cleared and with only single paddock trees (marri) remaining.
The lots are within the Rocky Creek Catchment of the Ellen Brook. Some revegetation has been undertaken on site and has been effective.

Existing Environment

The Ellen Brook catchment experiences a Mediterranean climate of hot dry summers and cool wet winters. Ellen Brook discharges on average 37 million m_3 of runoff annually, representing 6% of the total water input to the Swan River estuary. Despite this relatively small contribution of runoff, Ellen Brook contributes on average 26 t of total phosphorus annually, which represents 36% of total inputs of phosphorus to the estuary (Swan River Trust, 1995).
Excessive inputs of nutrients, predominately nitrogen and phosphorus, have been responsible for regular, potentially harmful algal blooms in upper reaches of the estuary. These algal blooms are a symptom of ecological disturbance in the estuary and have led to reduced amenity of the waterways. In addition to unsightly scums and foul odours, the blooms have also been accompanied by occasional fish deaths. Because of their potential toxicity, warnings have been issued to the community to avoid direct contact with affected waters and not to eat fish or shellfish taken from the river during blooms.
In addition to being a major contributor to nutrient enrichment of the Swan-Canning estuary and associated waterways, the Ellen Brook catchment has also been experiencing land degradation in many areas. Land degradation in the catchment has included soil salinity, wind erosion, water erosion, waterlogging, phosphorus and nitrogen export and flooding. If left unmanaged, these processes have the potential to compromise the economic, environmental and social well being of the catchment and its community and threaten certain activities and lifestyles.

The SC2-Chandala EMU is located on both the Swan Coastal Plain fluviatile deposits and the Dandaragan Plateau scarps. Phosphorus retention capacity is low in the deep sands and moderate to high in the gravelly sands. Large areas of this EMU are susceptible to salinity, waterlogging, phosphorus export, wind erosion, and to a lesser degree water erosion. Very little natural vegetation remains which exposes the landscape to these degradational processes, and the risk of land degradation will increase with clearing, overstocking and development without consideration for land capability constraints.

Drainage areas (sub-catchments):
The drainage area covers mostly poorly drained plains, where in some places there has been a requirement for artificial drains to relieve waterlogging. SC2-Chandala is situated within the Bampanup, Chandala and Muchea-Upper Swan drainage areas. The southern region is more adequately drained than the northern section and this is evident by a number of streams that flow in an east-west direction and join the Ellen Brook. Phosphorus export is mainly in soluble forms and transported via leaching to shallow groundwater.

Vegetation Cover (%):
Approximately 10% of the total area of the SC2-Chandala EMU is covered by vegetation (See Figure 27), which is an extremely poor coverage considering the susceptibility of the area to salinity, waterlogging, phosphorus export, wind erosion and water erosion. This vegetation exists as small isolated remnants, which does not seem to be well linked with ecological corridors. Revegetation within this EMU is a priority management action to mitigate and prevent further degradation. There are significant areas that have been parkland cleared and there will need to be a strategy to replace older trees left standing in grazing paddocks if this level of coverage is to be retained. Lots 3 and 7 have been extensively cleared. Revegetation as proposed in this plan will seek to establish the large trees which previously existed on the site – marri and

Land Types	**%**	
Yanga	75	Poorly drained plain with grey sand and intervening swamps: also areas of bog iron ore, marl or solonetzic soils.
Coonambidgee	10	Gently sloping sandy fringes to Dandaragan Plateau.
Reagan	5	Gently sloping scarp sands and some gravel.
Yalyal	5	Drainage depressions in very gently sloping plains.

Land Use	**%**
Vegetation	10
Grazing	80
Industrial/Commercial	5
Perennial Horticulture	5

Land Capability Considerations:

Approximately 5% of the total area within the SC2-Chandala EMU is currently being used for industrial/commercial purposes. Much of the land used for commercial/industrial purposes has a low capability for on-site effluent disposal, and alternative management procedures such as discharge to sewer or small sewerage treatment plans will need to be considered in more densely clustered industrial sites. The sewerage disposal for Lot 3 has been existing for over ten years. This is adequate to cope with the projected worker requirement for the initial development of a trucking depot on Lot 3.
The grazing of animals on the Ellen Brook Plausplain leads to high levels of animal excrement entering the tributaries of Ellen Brook, in this case the Rocky Creek. Exclusion of animals from the drains and flow lines entering Rocky Creek will provide a protective benefit for the waterway.

Land Management Guidelines:

Management issues for this parcel of land are associated with vegetation re-establishment and protection, waterlogging and nutrient export. Based on these factors the following land management priorities arise:

Waterlogging of this site may be alleviated by

.

- Establishing trees that are high water users, adaptable to particular environmental conditions
- Remove excess water by surface drainage to a holding dam to be vegetated with rushes and sedges.

Nutrient Export from this site will be alleviated by

- Increased use of deeper rooting plant species. The proposed 15 metre vegetation buffer will absorb significant nutrient existing in the soil profile
- Retention of drainage in vegetated settlement ponds.
- Retention or establishment of vegetated buffer zones (nutrient filters) along drainage channels and tributaries of Ellen Brook.

MANAGEMENT PLAN

Lot 3 Great Northern Highway Muchea

Drainage Sump South east corner of Lot 3 to be vegetated with rushes and sedges to remove nutrient

Drain on the western side of the property is between the rural fencing and the industrial fencing. Animals are excluded from the drain.

Drain from the northern side of the entrance road enters a culvert to exit to the sump. Mowing of the grass is recommended to prevent drain becoming blocked. The retention of the couch/rye grass is recommended to remove nutrient.

ACTIONS

1. Monitoring of peizometres and sump will be annual in October. When obtaining the samples depth to the water table should be established. The Chittering Landcare Centre can assist with this process.
2. Drainage to sump on south eastern corner of the property will occur through existing drains. These drains will form part of the revegetation plan.
3. Revegetation of a ten metre strip along the eastern boundary of the property (adjacent to Great Northern Highway at a rate of 10,000 stems per hectare. This will be at a rate of 20% tree (over three metres) 60% mid storey (shrubs) and 20% understorey. This should significantly assist with waterlogging on the site. Species list at Appendix 1.
4. Existing drains which flow to the sump will be vegetated to prevent erosion. The current drains are covered with couch grass and this is quite suitable. Some mowing will be required when over grown to ensure that the drains work effectively.
5. All hardstand areas will be sloped to flow to collecting drains
6. Any soil contaminated by hydrocarbon spills (fuel or oil) will be immediately removed to a holding container and disposed of in an appropriate manner at Red Hill Disposal Site. This is to prevent hydrocarbon contamination of the surface water.
7. No repairs of vehicles to be undertaken on site. Storage of hydrocarbons will be in a concrete bunded area capable to containing the complete volume of the containing vessel.

SAMPLING PLAN

Forms below or similar are used to identify the sample site and location.

Site no.	Site Name	Location	Northing	Easting
1	Piezo 1	Lot 3 Great Northern Highway Muchea		
2	Piezo 2	Lot 3 Great Northern Highway Muchea		
3	Sump	Lot 3 Great Northern Highway Muchea		

	Parameters	Bottle type	Sites	Sampling events	Samples /site	Total bottles
Water	Total nutrients	250mL plastic	3	1	1	3
	TDS	250mL plastic	3	1	1	3
	Inorganic	500 ml	3	1	1	3 (Tested by landcare centre)

It is important to collect quality control samples as firm conclusions cannot be drawn from sampling data unless the quality of the data is known.

Ensure that labelling on the bottle to be filled is correct and that the sample number matches the number on the paperwork. Check that the grab pole sampler or dipper is clean.
Extend the pole sampler or dipper so that it will reach the point that you wish to sample. If the hole or sump is dry note this on the sheet.

1. Take the first sample. The sample bottle will be labelled prior to the time of sampling and collection in the field to ensure efficiency and organisation.

   Use this sample to rinse the labelled sample container three times. Cap, shake well and rinse out three times.

2. Remove the cap from the sample container only at the time of sampling and replace the cap immediately after collection of the sample.

3. Fill the bottle to the shoulder. Bottles can be obtained from the landcare centre or from the chosen laboratory.

4. Collected samples will be stored in an esky chilled to 4 ^{o}C with ice bricks out in the field and overnight in a refrigerator – deliver to the laboratory as soon as possible.

The Australian and New Zealand Water Quality Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000) provides trigger values for both ecosystems and human health protection, as well as the following environmental values: aquatic ecosystems; primary industries; recreation and aesthetics; and drinking water.

The Guidelines recognise three levels of protection for aquatic ecosystems: areas which high conservation value, slightly to moderately disturbed ecosystems; and highly disturbed ecosystems. To assess the level of toxicant contamination in aquatic ecosystems, trigger values were developed from data using toxicity testing on a range of test species (ANZECC & ARMCANZ, 2000). An exceedance of the trigger value indicates that there is the *potential* for an impact to occur and should thus trigger a management response such as further investigation and possible remediation or adaptation of the guidelines according to local conditions (ANZECC & ARMCANZ, 2000).

Ellen Brook and the Rocky Creek Catchments are moderately disturbed ecosystems. The purpose of this testing is to monitor any changes over time, either improving or deteriorating. If any aberrations are noticed then action will need to be taken depending on the change.

The monitoring of these samples should be a condition of all businesses operating on the Ellen Brook Palusplain. The owners of Lot 3 are to be commended for undertaking this comprehensive plan.

REVEGETATION PLAN FOR ROADSIDE STRIP

1. In May spray area to be planted to kill competing grass and weeds.
2. Rip lines 1 metre apart across the contour of the land to a depth 300-400 mm.
3. After first substantial rains, plant tube stock. Tube stock is available from nurseries such as Muchea Tree Farm and Chatfields Nursery in Tammin.
4. Plants should be spaced 1 metre apart ensuring a mix of species is utilised.

REVEGETATION FOR DAM/SUMP

Rushes and sedges as per species list can be obtained from Chatfields Tree Nursery. Plants to be placed at 5 per square metre around and in the basin. Advice can be obtained from Chittering Landcare Centre.

APPENDIX 1

SPECIES LIST FOR REVEGETATION

Trees (20%) Upper storey

Flooded Gum -	Eucalyptus rudis
Marri	Corymbia callophylla

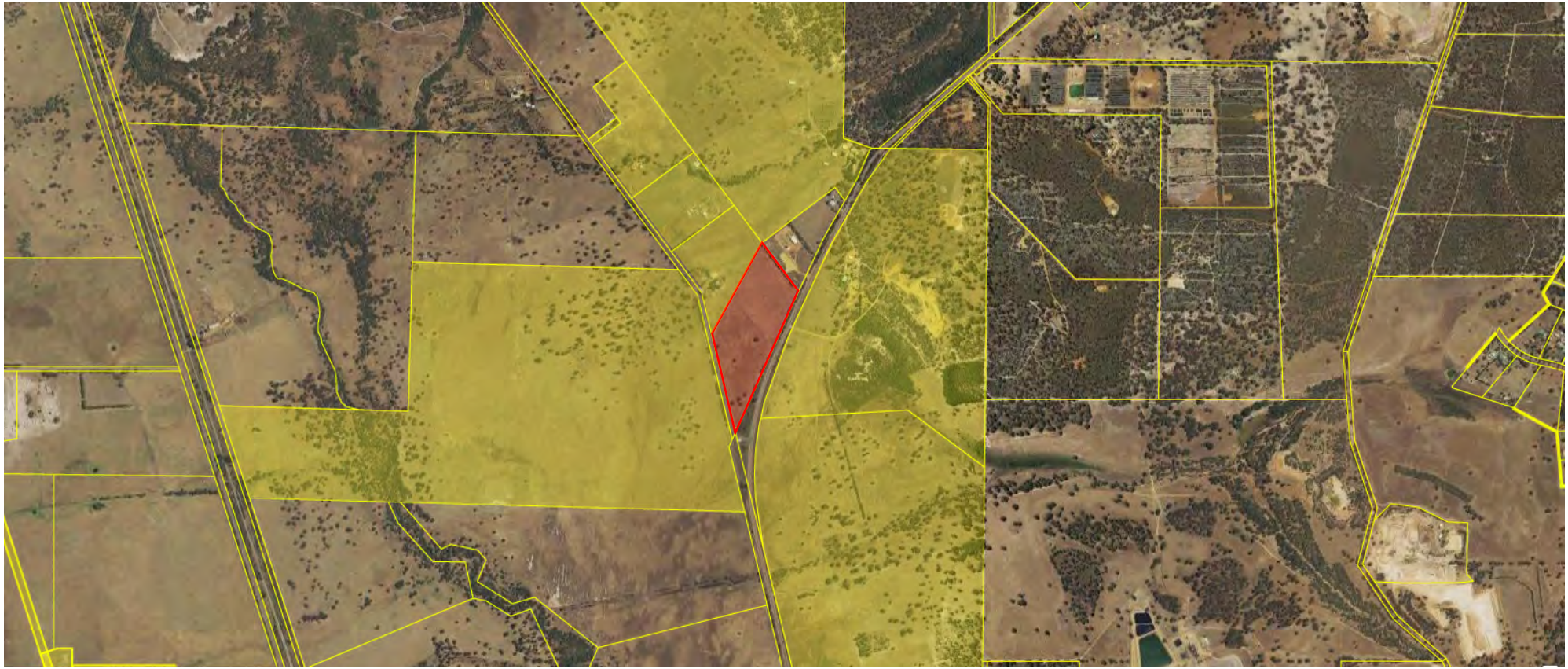
Shrubs (60%)Mid Storey

Hakea	Hakea prostrata
Honeybush	Hakea lissocarpha
Bottlebrush	Callistemon phoenecious
One sided bottlebrush	Callothamnus quadrifidis
Robin Redbreast	Melaleuca latteritia

Low (20%)

Prickly Moses	Acacia pulchella
Swan River Myrtle	Hypocalymma Angustifolium

Consultation Plan



Subject Lot

Properties consulted