

29 April 2021

West Tamar Council
PO Box 16
RIVERSIDE TAS 7250
Via email: wtc@wtc.tas.gov.au

To Whom It May Concern,

Representation Against Proposed 'Rural' Zoning of 437 Bridgenorth Rd Under the West Tamar Council Draft Local Provisions Schedule of the Tasmanian Planning Scheme.

I wish to make a representation against the proposed zoning of my property 'Tanglewood' at 437 Bridgenorth Rd, Bridgenorth (CT 250146/1) under West Tamar Council's Draft Local Provisions Schedule of the Tasmanian Planning Scheme. As per the Draft Zoning mapping advertised on West Tamar Council's website, my title is proposed to be zoned 'Rural'. However, based on the characteristics of my land and adjacent land that is proposed to be zoned (and is currently) 'Rural Living', I am of the opinion that my land would be more appropriately zoned 'Rural Living'. This would not be out of line with the current development pattern in the immediate area. Zoning the property 'Rural Living', would also potentially provide an opportunity to undertake a 2-lot subdivision of the land in the future (subject to future approval).

The lack of agricultural potential of the property is further discussed in an Agricultural Report completed by AK Consultants (now RMCG). This report also discusses the potential impact on adjacent land if my land was zoned 'Rural Living' and a 2-lot subdivision occurred in the future. I have provided the Agricultural Report as an accompaniment to this letter.

Rezoning this land to 'Rural Living' would be compliant with the purpose of the Rural Living Zone as described in the *Guideline No 1 – Local Provisions Schedule (LPS): Zone and Code Application* document (Guideline No 1). This describes the Rural Living Zone purpose as:

11.1.1 To provide for residential use or development in a rural setting where:

- (a) services are limited; or
- (b) existing natural and landscape values are to be retained.

11.1.2 To provide for compatible agricultural use and development that does not adversely impact on residential amenity.

11.1.3 To provide for other use or development that does not cause an unreasonable loss of amenity, through noise, scale, intensity, traffic generation and movement, or other off site impacts.

11.1.4 To provide for Visitor Accommodation that is compatible with residential character.

Rezoning the title also complies with the Application guideline RLZ1 in the Guideline No 1 document:

RLZ 1 The Rural Living Zone should be applied to:

- (a) residential areas with larger lots, where existing and intended use is a mix between residential and lower order rural activities (e.g. hobby farming), but priority is given to the protection of residential amenity.

As identified in Agricultural Report, my property is described as having lifestyle characteristics with negligible agricultural potential.

Under the existing *West Tamar Interim Planning Scheme 2013* my land is zoned 'Rural Resource'. This means it was included in the Land Potentially Suitable for Agriculture Zone Mapping. I note RLZ 4 under Guideline No 1 states the Rural Living Zone should not be applied to land that:

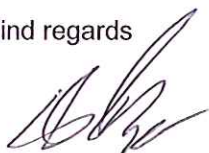
(c) is identified in the 'Land Potentially Suitable for Agriculture Zone' available on the LIST, unless the Rural Living Zone can be justified in accordance with the relevant regional land use strategy, or supported by more detailed local strategic analysis consistent with the relevant regional land use strategy and endorsed by the relevant council.

Upon reviewing the *Northern Tasmanian Regional Land Use Strategy* rezoning my land to 'Rural Living' is consistent with sections D.2.2.2 - Rural Residential Areas and D.2.2.4 - Key Planning Principles for Rural Areas. Under D.2.2.4 it would be specifically in line with the following points:

- Support rural living opportunities in appropriate locations (Rural Residential Area) where it does not compromise or fragment productive rural land.
- Recognise rural living use as a legitimate residential lifestyle subject to appropriate location criteria.

Thank you for the opportunity to provide comment on the Draft Local Provision Schedule of the Tasmanian Planning Scheme for West Tamar. Please consider my representation and please contact me if you have any queries or questions.

Kind regards



David Isaks
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23 APRIL 2021

Agricultural Report

Report for David Isaks

Property Location: 437 Bridgenorth Rd, Bridgenorth

Prepared by Michael Tempest & Astrid Ketelaar
AK Consultants (now RMCG)
29 York Town Square
Launceston, TAS 7250


SUMMARY	
Client:	Mr David Isaks
Property identification:	<p>'Tanglewood' 437 Bridgenorth Rd, Bridgnorth 7277</p> <p>Zoning: Rural Resource, West Tamar Interim Planning Scheme 2013.</p> <p>CT 250146/1</p> <p>PID 7448369</p> <p>19.4ha</p>
Proposal:	Rezoning of the subject title to enable a future 2 lot subdivision.
Land capability	<p>Published Land Capability (1:100,000) Class 4 (13.4ha), Class 5 (1.3ha) & Class 6 (4.7ha)</p> <p>Assessed Land Capability (1:10,000) Class 5 (10.9ha) & Class 6 (8.5ha)</p>
Assessment comments:	An initial desktop feasibility assessment was undertaken followed by a field inspection on the 18th of January 2021, to confirm or otherwise the desktop study findings of the agricultural assessment. This report summarises the findings of the desktop and field assessment.
Conclusion:	<p>Rezoning 437 Bridgenorth Rd to 'Rural Living' will result in the loss of 19.4ha of Class 5 and Class 6 from the agricultural estate. On the title there is an existing dwelling, two small dams (unknown capacity), 11.6ha of native vegetation and 6ha of pasture that is currently predominantly utilised for horse grazing. The land currently displays 'lifestyle' characteristics similar to adjacent and nearby 'Rural Living' zoned titles. The majority of adjacently zoned 'Rural Resource' titles also display similar characteristics as the subject title. Rezoning this title to facilitate a future 2 lot subdivision is unlikely to place any further constraints on adjacent land than already occurs.</p> <p>It is feasible to achieve appropriate separation distances between any future new dwellings and existing and potential primary industry use in the vicinity to minimise the risk of constraining agricultural use.</p>
Assessment by:	<div>  <hr/> Michael Tempest, Senior Consultant </div> <div>  <hr/> Astrid Ketelaar, Associate </div>

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1 Introduction

The subject land is located at 'Tanglewood', 437 Bridgenorth Rd, Bridgenorth. Current zoning of the title is 'Rural Resource' under the *West Tamar Interim Planning Scheme 2013* (the Planning Scheme). The title is proposed to be zoned 'Rural' under West Tamar Council's Local Provisions Schedule of the Tasmanian Planning Scheme (LPS), as advertised in March-April 2021.

The proponent seeks to alter the proposed zoning from 'Rural' to 'Rural Living', to facilitate a future 2 lot subdivision. This report considers the agricultural aspects of the proposal.

2 Method

All relevant information available at desktop level was considered to determine the site's ability to support agricultural use either individually or in conjunction with land in the vicinity. Publicly available data sets have been considered. These are available on LIST (www.maps.thelist.gov.au) and include:

- Soils
- Enterprise suitability mapping
- Cadastral Parcels
- Hydrographic lines
- Contours (10m)
- Tasmanian Interim Planning Overlay
- Tasmanian Interim Planning Scheme Zones
- TASVEG 4.0
- Land Capability
- Underlying Geology
- Landslide Hazard Bands
- Threatened Flora Point
- Threatened Fauna Point
- Land Potentially Suitable for the Agriculture Zone

Imagery including:

- Google Earth (2009-2018)
- State Aerial Photography (Available on LIST)
- ESRI Imagery (Available on LIST)

Other data sets and published information such as:

- Water Information Management System
- Tasmanian Irrigation Tranche 3 (Tasmanian Future Irrigation Project – Report to Government, 2016)
- Water Assessment Tool
- Grice, 1995, Soil and Land Degradation on Private Freehold Land

- Groundwater Information Access Portal

Land Capability has previously been assessed for the subject land through:

- Published Land Capability by Tas Government at a Scale of 1:100,000 (see Figure A1-5).
 - Pipers Report, 1991.

Soils have previous been assessed for the subject land through:

- Reconnaissance Soils Map Series of Tasmania by Tas Government at a Scale of 1:100,000
 - Beaconsfield – George Town Soil Report, 2001.

The preferred new zoning (Rural Living) and the potential for the proposed residential use to constrain agricultural use in the vicinity has also been considered.

A site assessment was conducted on the 18th of January 2021, to confirm or otherwise the desktop study findings. The onsite Land Capability Assessment (as per Grose 1999) was conducted on the title at a scale of 1:10,000 (see Appendix 3 for AK Consultants' Land Capability Assessment Protocol).

3 Description

3.1 LANDSCAPE CONTEXT

The subject tile (CT 250146/1) is located at 437 Bridgenorth Rd, Bridgnorth. The tile is 19.4ha in area and has an existing dwelling and associated sheds which are centrally located on the title. The slope across the land varies from gentle to steep. There is a ridge that runs in a south east to north west direction in the southern half of the tile. The peak of the ridge sits at approximately 180m Above Sea Level (ASL) with slopes to the west, north and east (ranging from 14-20%). North of the dwelling, the land is gently sloped with a northerly aspect.

Average annual rainfall is 684mm (Ti Tree Bend BoM gauge). Prevailing wind direction is from the north west (Launceston Airport Bom windrose)

The title is accessed via a shared driveway along its eastern boundary from Bridgnorth Rd to the north. The title has approximately 35m of frontage onto Bridgnorth Rd at its most northern point. It also has approximately 15m of frontage onto South Bridgenorth Rd at its most western point.

3.2 SOILS AND GEOLOGY

Published soils at a scale of 1:100,000 map the majority of the land as Eastfield Association (Ea), with approximately 0.7ha in the most south eastern corner mapped as Ecclestone Association (Ec). Ea is described as brown, mottled, texture contrast soils with dolerite fragments throughout, loamy topsoils, sandy sub-surface, with ironstone, and clayey subsoils developed on dolerite hills. Ec soils display similar characteristics to Ea although can be formed over both dolerite and tertiary sediments, with grey-brown soils more prevalent.

During the site visit, five soil pits were augered to a depth of 60cm (where possible) and assessed for Land Capability. All pits were within the mapped Ea and displayed characteristics that are consistent with the Ea description. Because of the stony nature of these soils and their association with dolerite outcrops, they have not been extensively utilised for agriculture in the region.

Underlying geology (1:25,000) loosely conforms with soil mapping, with the majority of the title mapped as Jd (Jurassic dolerite), while a small strip along the south eastern boundary is mapped as Qn which is described as; pisolithic ironstone gravel, cemented in places, of lag, alluvial and colluvial origin. See Figure A1-5 for published soils and geology.

3.3 VEGETATION

Approximately two thirds of the title is covered in native vegetation. Some of this in the north west section of the title has had the understorey converted to unimproved pasture, however, the majority has a vegetation community structure. TasVeg 4.0 maps 11.6ha as *Eucalyptus amygdalina* on dolerite forest (DAD). On the balance of the title is a dam, the existing dwelling and associated infrastructure and pasture, divided into paddocks utilised for horses. TasVeg 4.0 maps this area as agricultural land (FAG).

The extent of the mapped vegetation communities is consistent with the observed vegetation on site. The actual native vegetation community type was not confirmed, although dolerite was confirmed as being present and *Eucalyptus amygdalina* appeared to be the dominant tree species.

3.4 LAND CAPABILITY

Published Land Capability (1:100,000) maps the title as a mix of Class 4 (13.4ha) Class 5 (1.3ha) and Class 6 (4.7). When onsite a Land Capability assessment was conducted at a scale of 1:10,000. From this assessment it was determined that there is 10.9ha of Class 5 land and 8.5ha of Class 6 land on the subject title. Class 5 land is defined as; land unsuited to cropping and with slight to moderate limitations to pastoral use. While Class 6 land is described as: land marginally suitable to grazing due to severe limitations.

The main limitations that resulted in a Class 5 assessment was gravel present in the profile and drainage limitations. Not all assessment pits could be augered to the full 60m depth, this is assumed to be due to sub-surface stone (dolerite). In the area assessed as Class 6, surface dolerite and dolerite outcrops are abundant, which would limit this area's ability to be cleared and utilised for agriculture, hence why this area is still covered in native vegetation. Full Land Capability class descriptions are available in Appendix 2 and see Appendix 3 for Land Capability assessment and soil profile.

The land is not classed as Prime Agricultural Land under the Protection of Agricultural Land Policy 2009.

3.5 LAND USE ON SUBJECT TITLES AND EXISTING ASSOCIATED AGRICULTURAL ENTERPRISE

Approximately 6ha of the land is utilised for low intensity grazing (horses), with the majority of the native vegetation fenced off from the pastured areas. A small number of sheep from a neighbouring property are occasionally used to graze within the native vegetation area to assist with fuel management. The existing scale of the enterprise would best be described as lifestyle¹.

3.6 EXISTING AND POTENTIAL IRRIGATION ON THE TITLE

The land is located in the Muddy Creek sub-Catchment of the Tamar Estuary Catchment. Muddy Creek flows south to north through the most south western corner of the title, and it also runs along the north western boundary of the title. There is an existing unregistered dam located in the most northern section of the title,

¹ As defined by AK Consultants in Ketelaar, A and Armstrong, D. 2012, Discussions paper – Clarification of the Tools and Methodologies and Their Limitations for Understanding the Use of Agricultural Land in the Northern Region which was a paper written for Northern Tasmania Development.

which is located on an unnamed tributary of Muddy Creek. The size of this dam is unknown and there are no water allocations for irrigation associated with the dam or the title in general. There is also a small stock dam located near the eastern boundary further south. According to DPIPWE's Water Assessment Tool, there is 67ML of Surety 5 winter take water and 38ML of Surety 6 winter take available from Muddy Creek from its most north point on the subject title for irrigation. Surety 5 water is expected to be available eight years out of ten and Surety 6, approximately six to seven years out of ten. To utilise this water for summer, it would need to be stored. Given there is an existing small dam on the title and some potential for additional storage options potential for an irrigation water resource of 10ML could be developed relatively easily.

The title is located with the proposed Tamar Irrigation Scheme, which is currently in its prefeasibility phase²

Despite the potentially available water for irrigation development and an existing dam, it is considered unlikely that irrigation resources would be developed on the land for any kind of intensive agricultural use because of the Land Capability limitations.

3.7 SURROUNDING LAND USE

The subject title is surrounded by 11 adjacent titles which range in size from 2ha to 106ha. Nine of the surrounding titles have existing dwellings. The three most northern adjacent titles are zoned 'Rural Living' under the Planning Scheme, while all other adjacent titles are zoned 'Rural Resource'.

Under the LPS the three titles currently zoned 'Rural Living' are proposed to be zoned 'Rural Living D', this means that future subdivision down to 10ha lots will be an Acceptable Solution under the new Planning Scheme. Six of the adjacent titles are proposed to be zoned 'Rural' (the same as the subject title), while two of the western titles are proposed to be zoned 'Agriculture'.

Of the 11 adjacent titles, nine of these would be described as lifestyle lots, due size, existing dwellings, existing native vegetation and/or lack of agricultural land. Directly to the west, west of South Bridgenorth Rd is CT 243359/1, which is 35ha in area. This title has an existing dwelling and has approximately 14ha that appears to be utilised for grazing. This title would best be described as having 'hobby scale' characteristics. To the south west is CT 130859/1. This title is 106ha and is utilised for a mix of pasture, native vegetation and plantation forestry. The title has 'hobby scale' characteristics and is well connected to titles with 'commercial scale' characteristics (Ketelaar & Armstrong 2012).

3.8 OTHER POTENTIAL ENTERPRISES

Table 3-1 lists all the enterprises assessed within DPIPWE's Enterprise Suitability Project and their average mapped suitability for the subject title.

² Tasmania Irrigation website: <https://www.tasmanianirrigation.com.au/schemes-under-development> (accessed 19/4/21)

Table 3-1: Enterprise Suitability

SUITABILITY	ENTERPRISES
Well Suited	<i>Pinus radiata</i>
Well Suited with Soil Management	Rye Grass
Suitable	Barley, Blueberries, <i>Eucalyptus nitens</i> , Industrial Hemp, Lucerne, Olives, Potatoes, Pyrethrum, Wheat
Suitable with Soil Management	Linseed
Suitable with Frost Protection Installed	Sparkling Wine Grapes
Moderately Suitable	<i>Eucalyptus globulus</i> , Hazelnuts, Raspberries
Moderately Suitable with Soil Management	Carrot Seed, Carrots, Cherries, Onions, Poppies
Moderately Suitable with Frost/Heat Management	
Marginally Suitable	
Unsuitable	Strawberries

The Enterprise Suitability Mapping indicates that a mix of broadacre and high value crops are either suitable or suitable to moderately suitable with either soil management or frost management on the site. This correlates with Land Capability Class 4 soils (Published Land Capability dominate Class for the title). However, the Land Capability Assessment conducted at 1:10,000 determined that there is no Class 4 land on the title, with it being a mix of Class 5 and Class 6 land. The Land Capability indicators of surface stone, gravel, sub-surface stone and poor drainage make it questionable as to how many of these crops would actually be feasible, and in our opinion, it is highly unlikely that the land could actually be utilised for any of these activities on a 'commercial scale'.

It is unlikely that the site would be utilised for forestry plantations (*pinus radiata*) due to size, proximity of dwellings, and lack of other plantations nearby. It is also questionable as to whether the site would be attractive for utilisation of a high value, horticultural enterprise (such as blueberries) because of the Land Capability limitations, proximity of adjacent dwellings and potential for future conflict.

3.9 AGRICULTURAL LAND MAPPING PROJECT

Under the new State-wide Planning Scheme, the Department of Justice, Agricultural Land Mapping Project (ALMP), shows the title as 'unconstrained' and in the Agriculture Zone. The ALMP, was completed by the Department of Justice to provide Councils with spatial data to assist with segregating the Rural Resource Zone (and Significant Agriculture Zone where relevant) into the 'Rural' and 'Agriculture' Zones, as required under the new State-wide Planning Scheme. The constraints analysis that was utilised in the ALMP was not intended to provide a comprehensive analysis of all the factors that may contribute to the constraint of agricultural land as it was perceived to not be feasible to develop a model at state-wide level that could consider all factors of each individual title. Instead, it was developed to provide a tool for Councils to utilise to identify areas for further investigation that could be potentially constrained.

The 'unconstrained' mapping would most likely have been driven by the high value crops (blueberries and sparkling wine grapes) that are mapped as being potentially suitable on the site, as well the proximity to potential irrigation water. In this instance it appears these have been rated higher than the constraints posed by the proximity to the 'Rural Living' zone.

As previously indicated, under the Council's LPS (on public exhibition March-April 2021) the subject title is proposed to be zoned 'Rural'. If 'Rural' and 'Agricultural', are the only zones being considered then 'Rural' is the more appropriate zoning due to the actual constraints of the land and the 'lifestyle' characteristics of the land and surrounding titles.

3.10 EXISTING STRATEGIC PLANNING

Rezoning this title to 'Rural Living' is consistent with D.2.2.2 - Rural Residential Areas and D.2.2.4 - Key Planning Principles for Rural Areas in the *Northern Tasmania Regional Land Use Strategy*.

4 Discussion

4.1 PRODUCTIVE CAPACITY OF THE SUBJECT LAND

Approximately 6ha of the land is utilised for horse grazing, while sheep are occasionally brought in to graze the native vegetation areas to assist with fuel reduction during the bushfire season. Based on the characteristics of the land it is highly unlikely that the land could be used for any agricultural activities beyond low intensity grazing. The scale of the current activity is considered to be 'lifestyle'. There is some potential for further intensification (most likely a grazing enterprise) to 'hobby scale', although, this would require an intensive regime on Class 5 & 6 land.

It may be feasible to develop an intensive horticulture enterprise on a portion of the property, that does not rely on the soil as a growth medium, especially when considering the potential, to acquire irrigation water. However, as the title is adjacent to the 'Rural Living' Zone, as well as adjacent 'lifestyle' properties within the existing 'Rural Resource' Zone there is risk of conflict between this type of intensive agricultural activity. Adjacent residential amenity is likely to be impacted. Social licence to operate would be a significant risk factor when considering such a high value investment.

After considering these factors, the productive capacity of the land is considered to be negligible. Land with these characteristics is best farmed in conjunction with other land to be able to realise the benefits of economies of scale. However, because of the existing dwelling on the subject title and characteristics of the adjacent land, there is little chance of this title being farmed in conjunction with adjacent land.

4.2 SIGNIFICANCE OF THIS LAND TO THE AGRICULTURAL ESTATE

19.4ha of Class 5 and Class 6 land, with 11.6ha of native vegetation and an existing dwelling that is predominately surrounded by titles with similar characteristics has little to no significance to the local or regional agricultural estate. If this land was rezoned to 'Rural Living' its loss would be insignificant.

4.3 POTENTIAL FOR CONSTRAINING ADJACENT AGRICULTURAL LAND USE

If the title is to be rezoned to 'Rural Living' to facilitate a future two lot subdivision, then the impacts of future development on surrounding agricultural use needs to be considered.

Potential for conflict between any proposed new dwellings and adjacent primary industry uses needs to be considered. There are a range of activities associated with grazing and cropping. Learmonth et.al. (2007) detail the common range of issues associated with sensitive uses such as residential use in the Rural Resource zone which can constrain primary industry activities (see Appendix 5). Common conflict issues associated with residential use in the 'Rural Resource' zone include spray drift from chemicals which would include fungicide, herbicide, and insecticide, noise from equipment (including shooting for game control), irrigation spray drift, odours, and dust.

The Western Australia Department of Health (DOH, 2012) has published guidelines relating specifically to minimising conflict between agricultural activities and residential areas through management of buffer areas. This study particularly focuses on spray drift and dust generation and recommends a minimum separation of 300m to reduce the impact of spray drift, dust, smoke, and ash. Through the establishment of an adequately designed, implemented and maintained vegetative buffer, this minimum separation distance can be reduced to 40m. The *West Tamar Interim Planning Scheme 2013* requires a 200m setback between 'Rural Resource' zoned land and new sensitive uses proposed within the 'Rural Living' Zone. Under the LPS a 200m setback is also required from a new sensitive use in the 'Rural Living' Zone to adjacent land zoned 'Agriculture' or 'Rural'. The LPS also provides Performance Criteria to reduce this setback if it can be demonstrated the proposal will not impact on adjacent agricultural activity.

If a 2 lot subdivision was to occur, it is the proponent's intention to create two lots (north and south) of approximately 10ha each. A dwelling could be constructed on the southern lot that could achieve a minimum 200m setback the 'Agriculture' Zone to the west and at least 50m from the 'Rural' Zone to the east and south. This would provide sufficient setbacks from the type of activities that occur on the adjacent land. If required, a vegetation buffer along the eastern and southern boundary could also be established to further mitigate the risk of constraining adjacent agricultural use in these directions.

5 Conclusions

Rezoning 437 Bridgenorth Rd to 'Rural Living' will result in the loss of 19.4ha of Class 5 and Class 6 from the agricultural estate. On the title there is an existing dwelling, two small dams (unknown capacity), 11.6ha of native vegetation and 6ha of pasture that is currently predominantly utilised for horse grazing. The land currently displays 'lifestyle' characteristics similar to adjacent and nearby 'Rural Living' zoned titles. The majority of adjacently zoned 'Rural Resource' titles also display similar characteristics as the subject title. Rezoning this title to facilitate a future 2 lot subdivision is unlikely to place any further constraints on adjacent land than already occurs.

It is feasible to achieve appropriate separation distances between any future new dwellings and existing and potential primary industry use in the vicinity to minimise the risk of constraining agricultural use.

References

- Department of Justice. (2017) Agricultural Land Mapping Project - Background Report, Tasmanian Government
- DPIPWE. (2021). Cadastral Parcels Dataset. TASMAP Department of Primary Industries, Parks, Water and Environment
- DPIPWE. (2007, November). Land Capability of Tasmania Dataset. Department of Primary Industries, Parks, Water and Environment
- DPIPWE. (2013). Tasmanian Vegetation Monitoring and Mapping Program TASVEG 3.0. Department of Primary Industries, Parks, Water and Environment
- Grice, MS. (1995). Assessment of Soil Degradation on Private Freehold Land in Tasmania, Department of Primary Industry and Fisheries, Tasmania. Report includes Land Degradation Maps 1:500,000 scale
- Grose, C. J. (1999). Land Capability Handbook. Guidelines for the Classification of Agricultural Land in Tasmania. (Second Edition ed.). Tasmania, Australia: Department of Primary Industries, Water and Environment
- Noble, K. E. (1990) Pipers Report – Land Capability Survey of Tasmania. Department of Primary Industry Tasmania
- Learmonth, R., Whitehead, R., Boyd, B., & Fletcher, S. (2007). Living and Working in Rural Areas. A handbook for managing land use conflict issues on the NSW North Coast. Centre for Coastal Agricultural Landscapes in Partnership with the Northern Rivers Catchment Management Authority
- West Tamar Council. (2013) West Tamar Interim Planning Scheme
- Qwest Tamar Council. (2019) Tasmanian Planning Scheme – West Tamar Local Provisions Schedule Proposed Zoning.
- Spanwick, S. Kidd, D. & Dimmock G. (2001). Beaconsfield – George Town Soil Report – Reconnaissance Soil Map Series of Tasmania. Department of Primary Industries, Water and Environment
- West Australian Government. (2012). Guidelines for Separation of Agricultural Land and Residential Land Uses. Department of Health, WA

Appendix 1: Maps

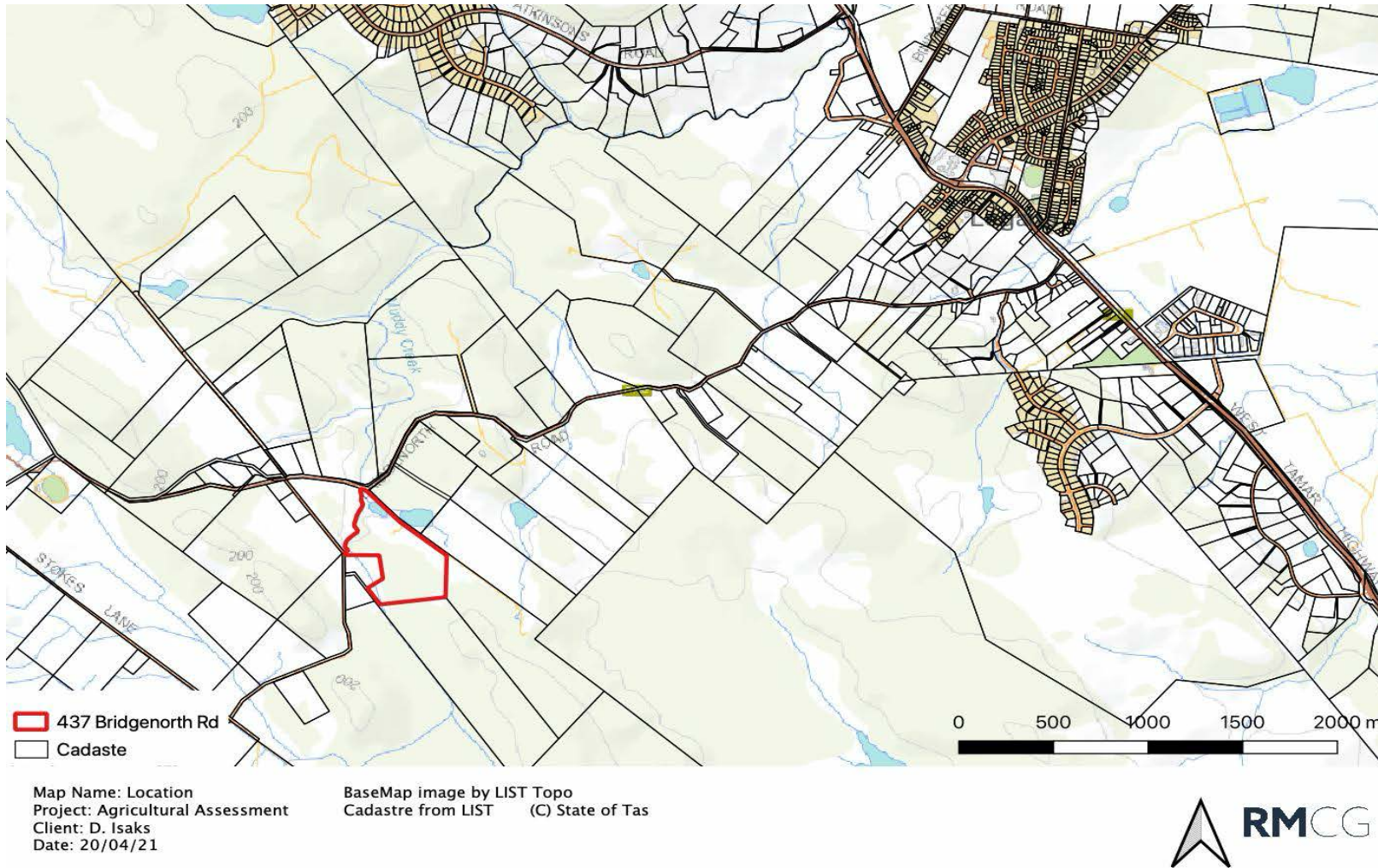
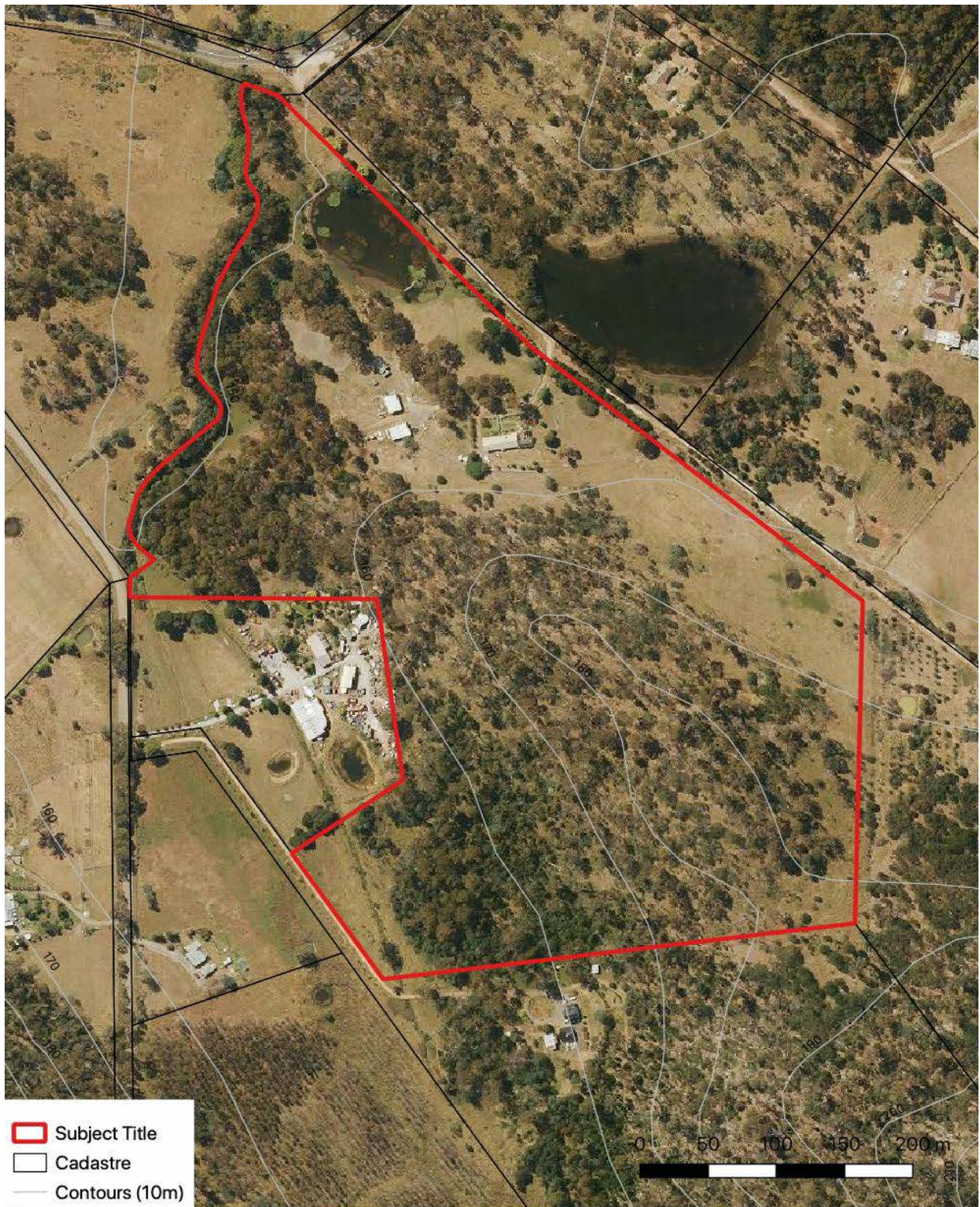


Figure A1-1: Location Map

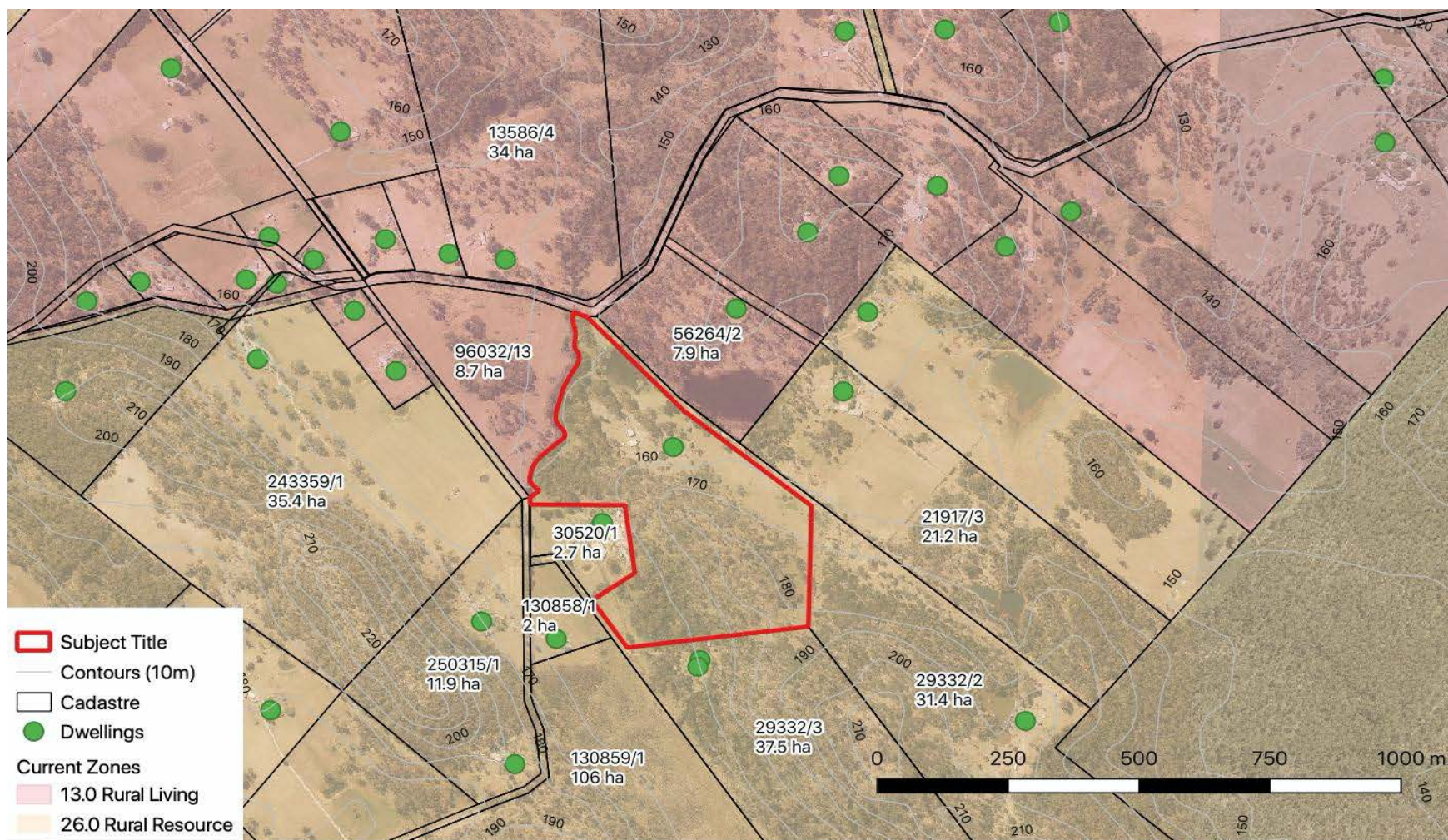


Map Name: Aerial Image
 Project: Agricultural Assessment
 Client: D. Isaks
 Date: 20/04/21

BaseMap image by LIST Ortho
 Cadastre from LIST (C) State of Tas



Figure A1-2: Aerial Image

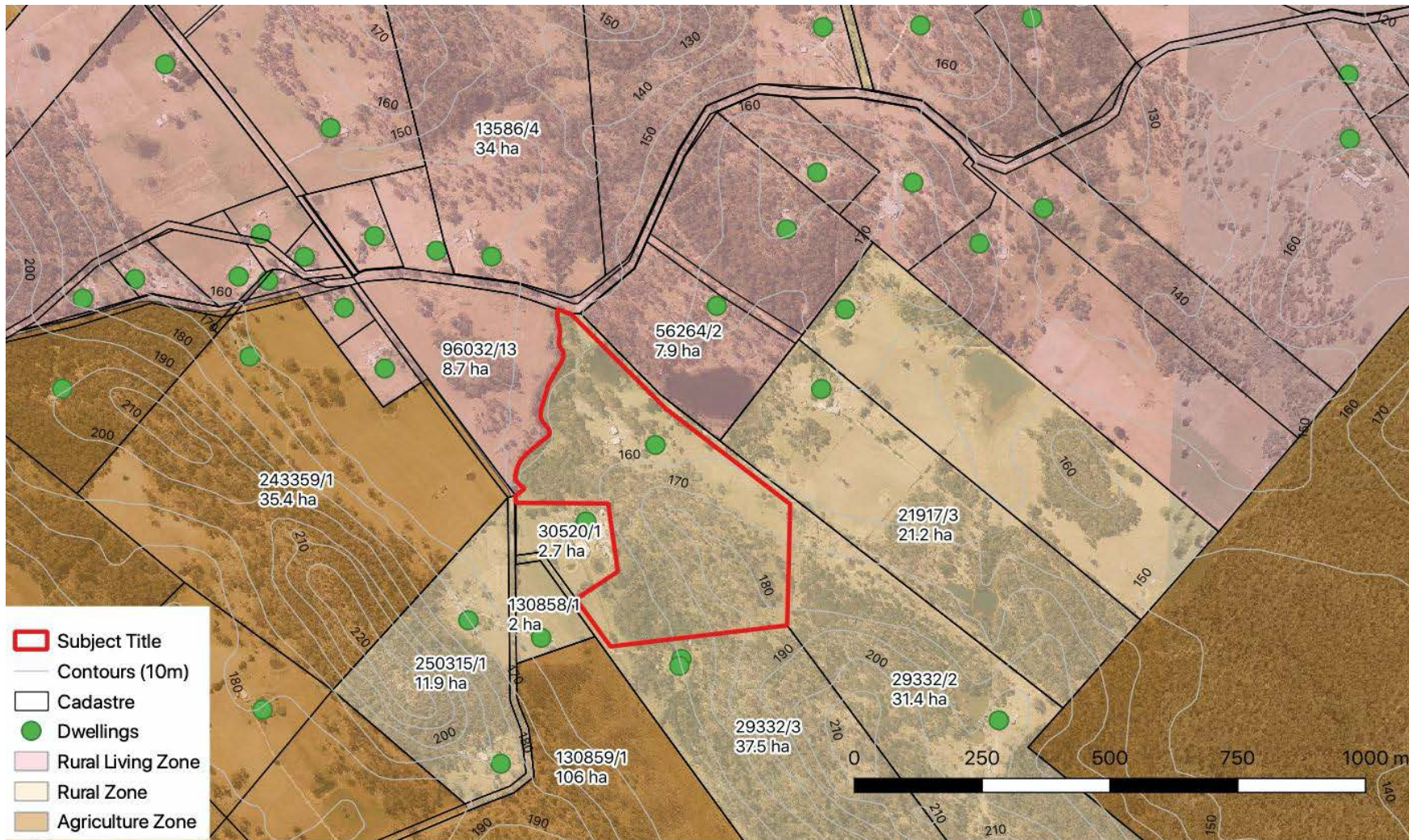


Map Name: Surrounding Titles
 Project: Agricultural Assessment
 Client: Isaks
 Date: 20/04/21

BaseMap image by LIST Ortho
 Cadastre from LIST (C) State of Tas



Figure A1-3: Existing zoning and surrounding dwellings

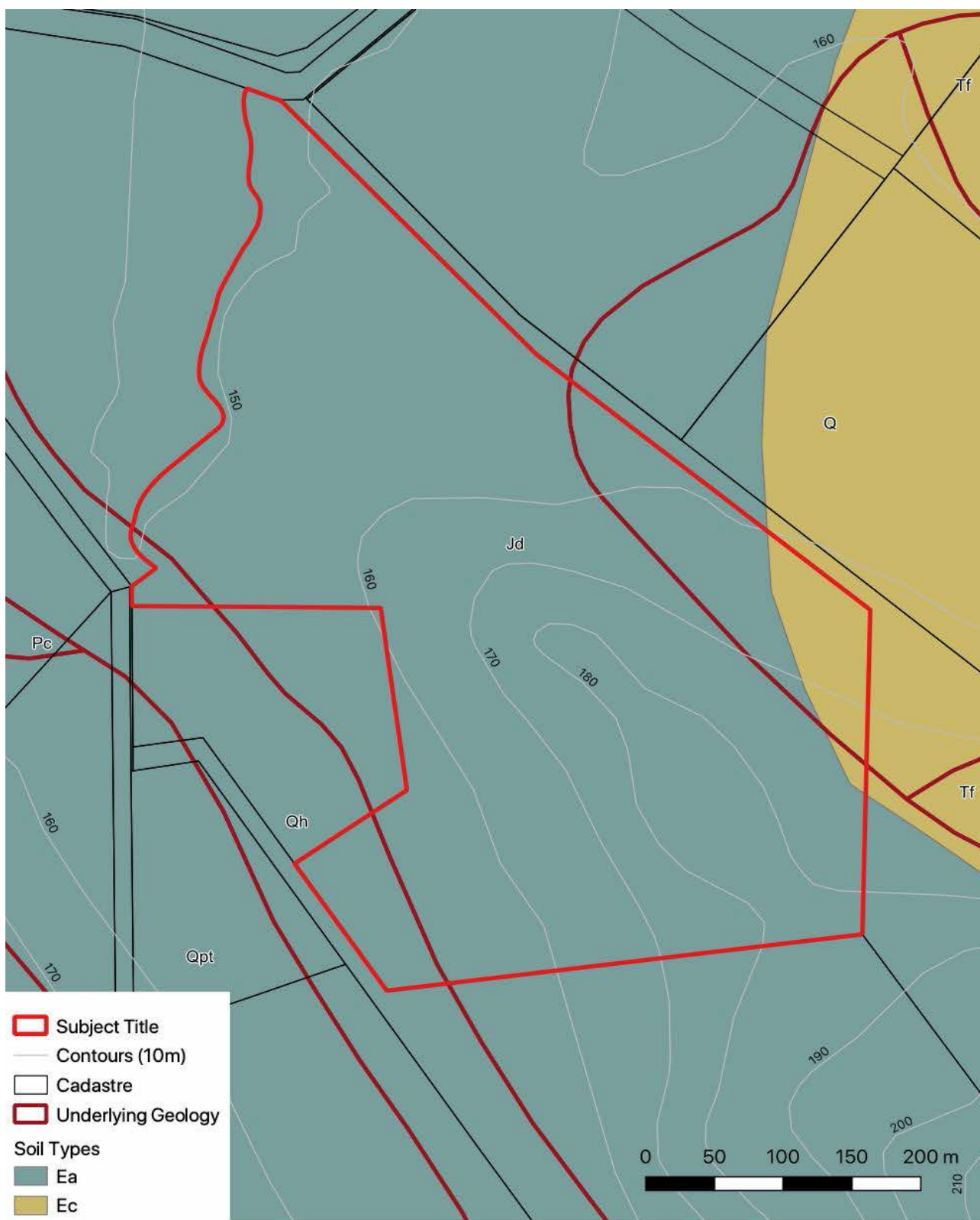


Map Name: Proposed New Zoning
 Project: Agricultural Assessment
 Client: Isaks
 Date: 20/04/21

BaseMap image by LIST Ortho
 Cadastre from LIST (C) State of Tas



Figure A1-4: Proposed new zoning and surrounding titles



Map Name: Published Soil & Geology
 Project: Agricultural Assessment
 Client: D. Isaks
 Date: 20/04/21

Soils from DPIWWE
 Geology from MRT
 Cadastre from LIST (C) State of Tas



Figure A1-5 Published Soils (1:100,00) & Published Geology (1:25,000)

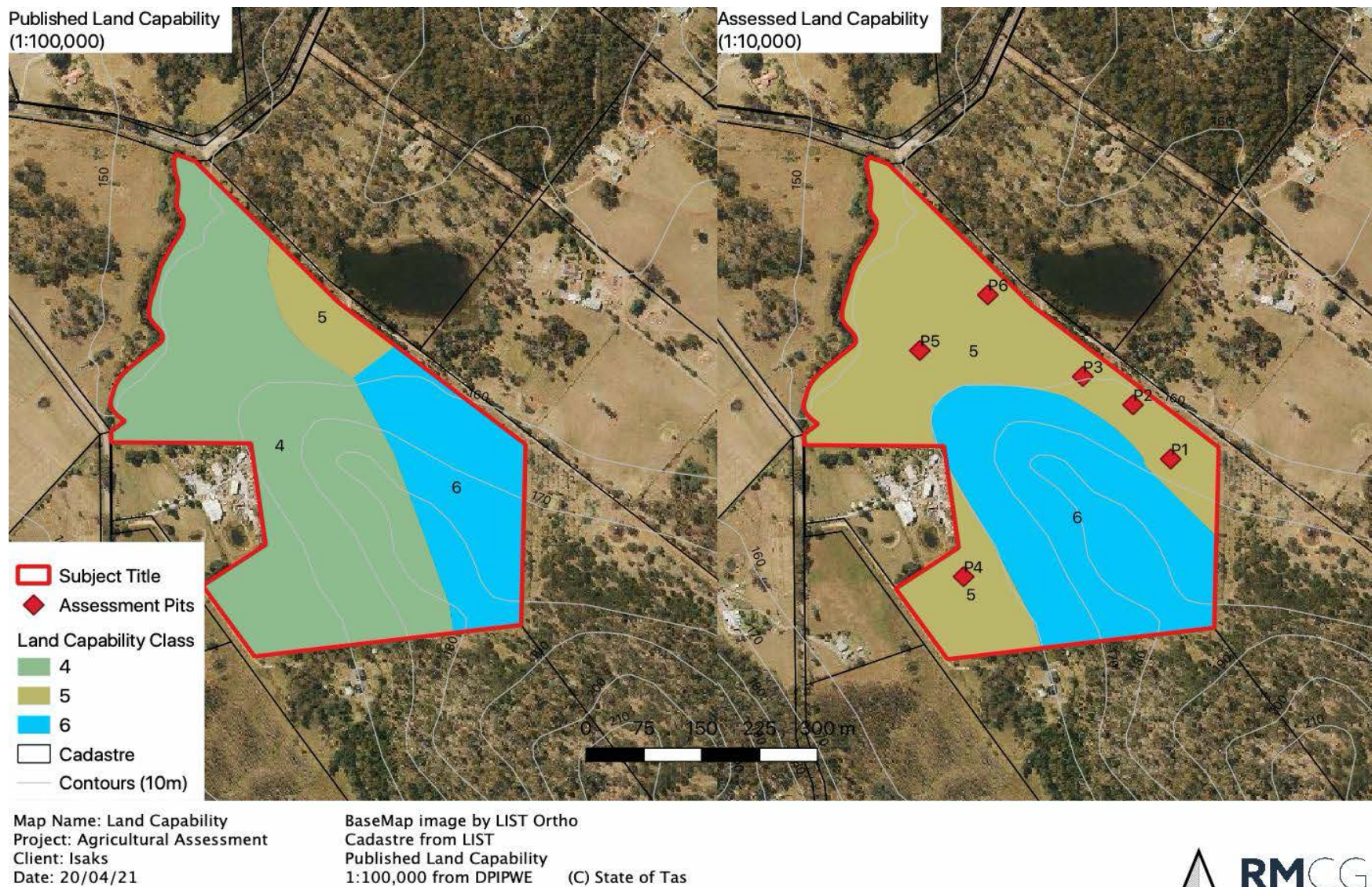


Figure A1-6: Land Capability

Appendix 2: Land Capability definitions from Grose (1999)

Prime agricultural land as described in the protection of agricultural land 2009:

CLASS 1: Land well suited to a wide range of intensive cropping and grazing activities. It occurs on flat land with deep, well drained soils, and in a climate that favours a wide variety of crops. While there are virtually no limitations to agricultural usage, reasonable management inputs need to be maintained to prevent degradation of the resource. Such inputs might include very minor soil conservation treatments, fertiliser inputs or occasional pasture phases. Class 1 land is highly productive and capable of being cropped eight to nine years out of ten in a rotation with pasture or equivalent without risk of damage to the soil resource or loss of production, during periods of average climatic conditions.

CLASS 2: Land suitable for a wide range of intensive cropping and grazing activities. Limitations to use are slight, and these can be readily overcome by management and minor conservation practices. However, the level of inputs is greater, and the variety and/or number of crops that can be grown is marginally more restricted, than for Class 1 land. This land is highly productive but there is an increased risk of damage to the soil resource or of yield loss. The land can be cropped five to eight years out of ten in a rotation with pasture or equivalent during 'normal' years, if reasonable management inputs are maintained.

CLASS 3: Land suitable for cropping and intensive grazing. Moderate levels of limitation restrict the choice of crops or reduce productivity in relation to Class 1 or Class 2 land. Soil conservation practices and sound management are needed to overcome the moderate limitations to cropping use. Land is moderately productive, requiring a higher level of inputs than Classes 1 and 2. Limitations either restrict the range of crops that can be grown or the risk of damage to the soil resource is such that cropping should be confined to three to five years out of ten in a rotation with pasture or equivalent during normal years.

Non-prime agricultural land as described in the protection of agricultural land 2009:

CLASS 4: Land primarily suitable for grazing but which may be used for occasional cropping. Severe limitations restrict the length of cropping phase and/or severely restrict the range of crops that could be grown. Major conservation treatments and/or careful management is required to minimise degradation. Cropping rotations should be restricted to one to two years out of ten in a rotation with pasture or equivalent, during 'normal' years to avoid damage to the soil resource. In some areas longer cropping phases may be possible but the versatility of the land is very limited. (NB some parts of Tasmania are currently able to crop more frequently on Class 4 land than suggested above. This is due to the climate being drier than 'normal'. However, there is a high risk of crop or soil damage if 'normal' conditions return.).

CLASS 5: This land is unsuitable for cropping, although some areas on easier slopes may be cultivated for pasture establishment or renewal and occasional fodder crops may be possible. The land may have slight to moderate limitations for pastoral use. The effects of limitations on the grazing potential may be reduced by applying appropriate soil conservation measures and land management practices.

CLASS 6: Land marginally suitable for grazing because of severe limitations. This land has low productivity, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use. This land should be retained under its natural vegetation cover.

CLASS 7: Land with very severe to extreme limitations which make it unsuitable for agricultural use.

Appendix 3: Land capability assessment

ASSESSMENT PROTOCOL

This protocol outlines the standards and methodology that AK Consultants (now RMCG) uses to assess Land Capability.

In general, we follow the guidelines outlined in the Land Capability Handbook (Grose 1999) and use the survey standards outlined in the Australian Soil and Land Survey Handbooks to describe (McDonald, et al. 1998), survey (Gunn, et al. 1988) and classify (Isbell 2002) soils and landscapes.

Commonly we are requested to assess Land Capability in relation to local government planning schemes. As such the level of intensity of the investigation is usually high and equivalent to a scale of 1:25 000 or better. The choice of scale or intensity of investigation depends on the purpose of the assessment. As the scale increases (becomes more detailed and the scale is a smaller number), the number of observations increases.

An observation can be as much as a detailed soil pit description or as little as measuring the gradient of an area using a clinometer or the published contours in a Geographical Information System and includes soil profile descriptions, auger hole descriptions, and observations confirming soil characteristics, land attributes or vegetation. The table below shows the relationship between scale, observations, minimum distances and areas that can be depicted on a map given the scale and suggested purpose of mapping.

Table A4-1: Assessment scale

SCALE	AREA (HA) PER OBSERVATION	MINIMUM WIDTH OF MAP UNIT ON GROUND	MINIMUM AREA OF MAP UNIT ON GROUND	RECOMMENDED USE
1:100 000	400ha	300m	20ha	Confirmation of published land capability mapping.
1:25 000	25ha	75m	1.25ha	Assessments of farms, fettering or alienation of Prime Agricultural Land.
1:10 000	4ha	30m	2,000m ²	Area assessments of less than 15ha.
1:5 000	1ha	15m	500m ²	Site specific assessments for houses and areas less than 4ha.
1:1 000	0.04ha	3m	20m ²	Not used. Shown for comparison purposes.

Based on 0.25 observations per square cm of map, minimum width of mapping units 3mm on map as per (Gunn, et al. 1988).

ASSESSMENT METHODOLOGY

With all assessments we examine a minimum of three observations per site or mapping unit and determine Land Capability on an average of these observations.

Land Capability is based on limitations to sustainable use of the land, including the risk of erosion, soil, wetness, climate and topography. The most limiting attribute determines the Land Capability class. This is not always a soil limitation and thus soil profile descriptions are not always required for each mapping unit. For example, land with slopes greater than 28%, areas that flood annually and areas greater than 600m in elevation override other soil related limitations.

The availability of irrigation water can affect the Land Capability in some areas. An assessment of the likelihood of irrigation water and quality is made where it is not currently available.

As a minimum all assessment reports include a map showing the subject land boundaries, observation locations, published contours and Land Capability.

DEFINITIONS

Land capability

A ranking of the ability of land to sustain a range of agricultural land uses without degradation of the land resource (Grose 1999).

PROTOCOL REFERENCES

Grose, C J. Land capability Handbook. Guidelines for the Classification of Agricultural Land in Tasmania. Second Edition. Tasmania: Department of Primary Industries, Water and Environment, 1999.

Gunn, R H, J A Beattie, R E Reid, and R H.M van de Graaff. Australian Soil and Land Survey Handbook: Guidelines for Conducting Surveys. Melbourne: Inkata Press, 1988.

Isbell, R F. The Australian soil classification. Revised Edition. Melbourne: CSIRO Publishing, 2002.

McDonald, R C, R F Isbell, J G Speight, J Walker, and M S Hopkins. Australian Soil and Land Survey Field Handbook. Second Edition. Canberra: Australian Collaborative Land Evaluation Program, CSIRO Land and Water, 1998.

ON SITE LAND CAPABILITY ASSESSMENT

Published Land Capability (LIST 1:100,000) maps the subject land as Class 4 (13.4ha), Class 5 (1.3) and Class 6 (4.7ha).

A site inspection was undertaken on the 18th of January 2021 and a Land Capability assessment was undertaken at a scale of 1:10,000. Six assessment pits were augured across the assessment area. This was accompanied by visual inspections across the title and slope calculations.

The results of the onsite Land Capability assessment determined that there is 10.9ha of Class 5 land and 8.5ha of Class 6 land on the title.

For the augured assessment pits there were four key characteristics that determined the assessed Land Capability:

- Drainage (d) – All profiles showed imperfect drainage characteristics through mottling (common & distinct or common & faint) from around 20cm to 60cm depth.
- Gravel (g) – Gravel was present in all of the profiles. This occurred in all layers and increased with depth.

- Depth (l) – In three of the six profiles, the full 60cm depth could not be reached. This is assumed to be due to sub-surface stone (most likely dolerite).
- Surface stone (r) – throughout the area assessed as Class 6 surface stone (dolerite) was prolific, both as individual stones and boulders, sheet rock and outcrops. None of this area has been cultivated and is retained as native vegetation.

Table A3-2: Land Capability Assessment Summary Table for Assessment Pits 2019

	SOIL	COMMENTS	COLOUR	TEXTURE	STRUCTURE (E)	COARSE FRAGMENT SIZE (G)		SOIL DRAINAGE (D)	SURFACE STONE (R)	SLOPE (E)	EROSION RISK		FLOOD RISK	LAND CAPABILITY
Pit No	Depth (cm)		Munsell			Type, mm	%	Mottle Severity	Presence	%	Water	Wind		
1	0-25	Ironstone throughout the profile. Cobble felt from 35-50cm.	7.5YR 2.5/2 Very dark brown	Sandy Clay Loam	Moderate	2-60	2-20		Present	12-18	Low	Low	Low	5dg
	25-60		7.5YR 2.5/3 Very dark brown	Medium clay	Strong	2-20	20-35	Common & Distinct						
2	0-20	Auger refusal at 20cm	7.5YR 2.5/2 Very dark brown	Sandy Clay Loam	Moderate	2-60	2-20		Present	5-12	Low	Low	Low	5l
3	0-10	Auger refusal at 10cm	7.5YR 2.5/2 Very dark brown	Sandy Clay Loam	Moderate	2-60	2-20		Present	5-12	Low	Low	Low	5l
4	0-25	Ironstone present	10YR 5/4 Yellowish brown	Clay loam	Moderate	2-60	50-70		Present	12-18	Low	Low	Low	5dg
	15-20		10YR 4/6 Dark yellowish brown	Heavy clay	Massive			Common & Distinct						
5	0-25	Ironstone present. Auger refusal at 30cm	10YR 2/2 Very dark brown	Loam	Moderate	2-60	2-20			0-5	Low	Low	Moderate	5lg
	25-30		10YR 3/4 Dark yellowish brown	Medium clay	Strong	2-20	50-70							
6	0-30	Ironstone present throughout the profile	10YR 2/2 Very dark brown	Loam	Moderate	2-60	2-20			0-5	Low	Low	Moderate	5g
	30-60		10YR 3/4 Dark yellowish brown	Medium clay	Strong	2-20	50-70							

Pit 1



Site: Tanglewood

Date: 18th January 2021

Pit: 1

Flood Risk: Low

Slope: 0-5%

Morphology: moderate easterly aspect

Surface condition: Semi-improved Pasture.

Table A3-3: Profile description

DEPTH (CM)		MUNSELL COLOUR		STRUCTURE		TEXTURE	GRAVEL	MOTTLE	COMMENTS
0	20	7.5YR	2.5/2	M	SC L	2-20%	-		Ironstone present throughout the profile
25	60	7.5YR	5/3	S	MC	20-35%	5		Cobbles present from 35-50cm

Duplex profile with moderately-structured soils with a Sand Clay Loam at the surface and a Medium Clay at depth. Gravel (ironstone) was present throughout profile, which increased with depth. Cobbles were evident between 35cm to 50cm when augering. Common & distinct mottling occurred from 25cm which is an indicator of poor drainage. The prevalence of gravel, cobbles and poor drainage characteristics dictate a Land Capability Class of 5. Pits 2 & 3 displayed similar characteristics, however, auger refusal occurred at 20cm and 10cm respectively.

Pit 4



Site: Tanglewood

Date: 18th January 2020

Pit: 4

Flood Risk: Low

Slope: 12-18%

Morphology: Moderate slope western aspect

Surface condition: Native vegetation.

Table A3-4: Profile description

DEPTH (CM)		MUNSELL COLOUR		STRUCTURE	TEXTURE	GRAVEL	MOTTLE	COMMENTS
0	25	10YR	5/4	S	CL	50-70%	-	Ironstone present
25	60	10YR	4/6	V	H C		5	

Duplex profile with moderately-structured soils; a Clay Loam over Heavy Clay at depth. Gravel occurred at 50-70% in the clay loam horizon. Mottling (common & distinct) occurred in the clay horizon, this is an indicator of poorly drained soils. Both the gravel prevalence and poor drainage characteristics dictates a Class 5 Land Capability Class.

Appendix 4: Photos



Figure A4-1: Example of surface stone within areas covered in vegetation.



Figure A4- 2: Existing pasture to the north of the existing dwelling.



Figure A4-3: Pasture and native vegetation interface.



Figure A4- 4: Pasture in the south east of the title.

Appendix 5: Potential conflict issues

Tables A5-1 and A5-2 describe the frequency and intensity of adjacent activities and the associated issues likely to constrain this use. These are a broad guide only and site specific, cultivar specific and seasonal variations occur. Aside from the specific issues associated with these activities Learmonth et. al. (2007) also provides a comprehensive list of potential land use conflict issues (see Figure A5-3). In proximity to the proposed dwelling there is predominantly grazing, however, there is also some plantation towards the south west. Tables A5-1 to A5-2 provide the rationale behind the recommended minimum buffers contained in Table A6-1 (Appendix 6).

Table A5-1: Farming activity – grazing

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Pasture sowing Herbicide spraying Cultivation Drilling.	Spray drift, noise Noise, dust Noise, dust.	Ground based or aerial – often very early in the morning.
Graze.	Noise at certain time e.g. weaning calves Livestock trespass.	Tractor.
Forage conservation Mow, Rake, Bale, Cart bales.	Noise, dust.	Tractor.
Fertiliser spreading.	Noise.	Tractor.
Insecticide spraying.	Spray drift Noise.	Ground based or aerial – often very early in the morning.

Table A5-2: Plantation forestry

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Planting.	Dust, Noise.	Ground based likely to all day.
Herbicide spraying.	Spray drift, Noise.	Ground and aerial likely to be very early in the morning.
Pruning/thinning.	Dust Noise Vehicle movement.	Use of loud machinery and regular heavy vehicle movement.
Harvesting.	Dust Noise.	Use of loud machinery and regular heavy vehicle movement.

Table A5-3: Typical Land Use Conflict issues

Living and Working in Rural Areas. A handbook for managing land use conflict issues on the NSW North Coast. Learmonth, R., Whitehead, R., Boyd, B., and Fletcher, S. n.d.

Table 1. Typical rural land use conflict issues in the north coast region

Issue	Explanation
Absentee landholders	Neighbours may be relied upon to manage issues such as bush fires, straying stock, trespassers etc. while the absentee landholder is at work or away.
Access	Traditional or informal 'agreements' for access between farms and to parts of farms may break down with the arrival of new people.
Catchment management	Design, funding and implementation of land, water and vegetatin management plans are complicated with larger numbers of rural land-holders with differing perspectives and values.
Clearing	Neighbours may object to the clearing of trees, especially when it is done apparently without approvals or impacts on habitat areas or local amenity.
Cooperation	Lack of mutual co-operation through the inability or unwillingness on behalf individuals to contribute may curtail or limit traditional work sharing practices on-farm or in the rural community.
Dogs	Stray domestic dogs and wild dogs attacking livestock and wildlife and causing a nuisance.
Drainage	Blocking or changing drainage systems through a lack of maintenance or failure to cooperate and not respect the rights of others.
Dust	Generated by farm and extractive industry operations including cultivating, fallow (bare) ground, farm vehicles, livestock yards, feed milling, fertiliser spreading etc.
Dwellings	Urban or residential dwellings located too close to or affecting an existing rural pursuit or routine land use practice.
Electric fences	Electric shocks to children, horses and dogs. Public safety issues.
Fencing	Disagreement about maintenance, replacement, design and cost.
Fire	Risk of fire escaping and entering neighbouring property. Lack of knowledge of fire issues and the role of the Rural Fire Service.
Firearms	Disturbance, maiming and killing of livestock and pest animals, illegal use and risk to personal safety.
Flies	Spread from animal enclosures or manure and breeding areas.
Heritage management	Destruction and poor management of indigenous and non indigenous cultural artefacts, structures and sites.
Lights	Bright lights associated with night loading, security etc.
Litter	Injury and poisoning of livestock via wind blown and dumped waste. Damage to equipment and machinery. Amenity impacts.
Noise	From farm machinery, scare guns, low flying agricultural aircraft, livestock weaning and feeding, and irrigation pumps.
Odours	Odours arising from piggeries, feedlots, dairies, poultry, sprays, fertiliser, manure spreading, silage, burning carcasses/crop residues.
Pesticides	Perceived and real health and environmental concerns over the use, storage and disposal of pesticides as well as spray drift.
Poisoning	Deliberate poisoning and destruction of trees/plants. Spray drift onto non-target plants. Pesticide or poison uptake by livestock and human health risks.
Pollution	Water resources contaminated by effluent, chemicals, pesticides, nutrients and air borne particulates.
Roads	Cost and standards of maintenance, slow/wide farm machinery, livestock droving and manure.
Smoke	From the burning of crop residues, scrub, pasture and windrows.
Soil erosion	Loss of soil and pollution of water ways from unsustainable practices or exposed soils. Lack of adequate groundcover or soil protection.
Straying livestock	Fence damage, spread of disease, damage to crops, gardens and bush/rainforest regeneration.
Theft/vandalism	Interference with crops, livestock, fodder, machinery and equipment.
Tree removal	Removal of native vegetation without appropriate approvals. Removal of icon trees and vegetation.
Trespass	Entering properties unlawfully and without agreement.
Visual/amenity	Loss of amenity as a result of reflective structures (igloos, hail netting), windbreaks plantings (loss of
Water	Competition for limited water supplies, compliance with water regulations, building of dams, changes to flows. Stock access to waterways. Riparian zone management.
Weeds	Lack of weed control particularly noxious weeds, by landholders.

Based on: Smith, RJ (2003) Rural Land Use Conflict: Review of Management Techniques – Final Report to Lismore Living Centres (PlanningNSW).

Agricultural 6: Agricultural requirements and potential constraints

Table A6-1: Agricultural Enterprises and Potential Constraints

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
	Sheep	Cattle	Dairy	Cereals	Others	Processed	Un-processed				
Land Capability	LC 3–6.	LC 3–5/6.	LC 3–5.	LC 1–4.	LC 1–4.	LC 1–4.	LC 1–4.	LC 1–4/5.	LC 1–4/5.	LC 1–4 or N/A	LC 4–6
Minimum paddock sizes	No minimum.	No minimum.	To suit grazing.	10–15ha min.	5–10ha min.	10ha min.	10ha min.	2–4ha.	2–5ha.	2–4ha min.	10–20ha min.
Farm size for a "viable" business	5,000–10,000 dse (area depends on rainfall).	5,000–10,000 dse (area depends on rainfall).	Capacity for at least 350 milkers.	Broadacre cropping will be a mix of crops in rotation with pasture and livestock. The area required for viability is highly variable.				4–10ha.	10–30ha.	5–10ha.	10–20ha min.
Agricultural Land Mapping Project (3)	333ha.		40ha.	133ha.		25ha.		10ha.			Not defined.
Irrigation water	Not required.	Not required.	Preferable 4–6ML/ha.	Not necessary.	Mostly necessary, 2–3 ML/ha.	Necessary, 2–6ML/ha.	Necessary, 2–6ML/ha.	Necessary, 1–3ML/ha.	Necessary, 2–3ML/ha.	Necessary, small quantity.	Not required.
Climate specifications	Lower rainfall preferred for wool.	No preferences.	High rainfall (or irrigation).	Susceptible to spring frosts. Difficult to harvest in humid coastal conditions.	Susceptible to spring frosts.	Susceptible to spring frosts.	Susceptible to spring frosts.	High rainfall (or irrigation).	Susceptible to spring frosts for vines. Susceptible to summer rains for cherries. Susceptible to disease in high humidity in March for vines.	Preferably low frost risk area.	Rainfall above 700–800 mm.
Infrastructure	Yards & shed.	Yards, crush, loading ramp.	Dairy shed.	Minimal.	Irrig facilities.	Irrig facilities.	Irrig facilities.	Irrig facilities.	Irrig facilities.	Plastic/glass houses.	None.
Plant & equipment	Minimal.	Minimal; hay feeding plant.	General purpose tractor, hay/silage feeding.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Tractors & implements.	Small plant.	None.
Market contracts	Not required.	Not required.	Necessary.	Not required.	Generally required.	Necessary.	Highly preferred.	Desired.	Desired.	Contracts preferable.	Varies.
Labour	Medium.	Low.	High.	Low.	Low.	Low.	Variable/medium.	High at times.	High at times.	High at times.	Low.
Local services	Shearers.	Vet.	Vet, dairy shed technician.	Agronomist, contractors.	Agronomist, contractors.	Agronomist, contractors.	Agronomist, contractors.	Pickers.	Pickers.	Pickers.	Contractors.

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS & VINES	NURSERIES & CUT FLOWERS	FORESTRY PLANTATIONS
Regional suitability	Dryer areas good for wool. All areas suitable; larger farm sizes needed for viability.	All areas suitable. Suits small farms.	Economics dictate large area necessary. Needs high rainfall or large water resource for irrigation.	Generally large areas, so need larger paddocks and larger farms.	Generally large areas, so need larger paddocks and larger farms.	Medium sized paddocks & farms; area for crop rotations and irrigation.	Medium sized paddocks & farms; area for crop rotations and irrigation.	Specific site requirements; proximity to markets and transport/carriers.	Specific site requirements; potentially available in most municipalities.	Proximity to markets is important.	Low rainfall areas less preferred.
Recommended min. buffer for individual dwellings (1)	50m to grazing area.	50m to grazing area.	50m to grazing area, 250m to dairy shed and 300m to effluent storage or continuous application areas (2).	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	200m to crop.	100m from crop for aerial spraying.
Recommended min. buffer for residential areas (1)	50m to grazing area.	50m to grazing area.	50m to grazing area, 500m to dairy shed.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	300m to crop.	Site specific (1).

Table A6-1 notes:

1. From (Learmonth, Whitehead, Boyd & Fletcher, 2007). These are industry specific recommended setbacks which do not necessarily align with Planning Scheme Setback requirements. Council should ensure they are aware of attenuation setback requirements for specific activities.
2. From (State Dairy Effluent Working Group, 1997).
3. The Agricultural Land Mapping Project (Dept of Justice, 2017) defined minimum threshold titles sizes that could potentially sustain a standalone agricultural enterprise

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Document review and authorisation

Project Number: # 919

Doc Version	Final/Draft	Date	Author	Project Director review	BST QA review	Release approved by	Issued to
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