

D R Chalmers and R Greiner
121 Cullens Road, South Preston TAS 7315

6 January 2020

Tasmanian Planning Commission
Attn: Commissioner John Ramsey

Dear Sir/Madam,

**RE: Central Coast draft Local Provisions Schedule
Representation Number 52**

This representation concerns **our property** at **121 Cullens Road, South Preston**, comprising titles **PID 1630514** and **PID 6990586**, as shown in Attachment 1, with a combined area of just under 80 hectares. Our property is proposed to be zoned "Agriculture". The representation advocates that the property be zoned "Rural".

We wish to advise that the property is not suitable for zoning "Agriculture" as it does not meet the Zone Application Guidelines AZ1, AZ2 and AZ3.

Our land has significant limitations in soil productivity due to steep topography in many places, high altitude (the house is at 530m above sea level), regional and soil characteristics (extensive areas of very rocky soils where even tractor access is difficult), lack of availability of water resources (the springs only support stock water dams), while flatter and lower-lying areas in the north-eastern parts of the property are prone to water logging and inaccessible for much of the year.

To support our argument, the following is a consolidated document based on our representation dated 3rd August 2019 but complemented with new information contained in an agricultural assessment of the property by AK Consultants (4 Dec 2019).

Published Land Capability mapping at 1:100 000 scale shows the land to be Class 4. However, Grose (1999) limits Class 4 to an altitude less than 500m ASL. With this limitation applied, all but 2ha in the north eastern corner and a less than 1ha area on the southern boundary, would be Class 5. Given the limitations altitude places on growing seasons and climatic factors it is appropriate to consider the majority of the title as Class 5 rather than Class 4. This analysis is shown in Attachment 2.

The north eastern two thirds of the title is mapped by Tasveg 3.0 as agricultural farmland (FAG) and there is approximately 55ha of pasture on the title. There is no cropping land.

The limited agricultural potential is demonstrated by approximately one third of the property (along the western and southern boundaries) being covered by native vegetation including mountain forest and high-country tussock-grass pastures. The limited agriculture potential is also evident from the surrounding land uses: We are 95% surrounded by conservation and plantation forests.

The land in proximity to the western and southern boundaries is covered in native vegetation which the Forest Groups layer on The LIST identifies as 'ETF' (Tall Eucalypt Forest) to the north west and south east, and 'ONF' (Other Native Forest) to the south west. The Forest Groups layer is derived from forestry data that assesses forests by height and crown density. TasVeg 3.0 maps the 'ETF'

vegetation communities as *Eucalyptus obliqua* forest over rainforest (WOR) and wet eucalypt forest and woodland (WOU) and the 'ONF' as *Acacia dealbata* forest (NAD). There are also two small areas of remnant vegetation (NAD and WOU) in the pasture areas.

The titles and land are not within an Irrigation District. The nearest Irrigation Districts are the Kindred North Motton Irrigation Scheme, 15km to the north east, and the Dial Blythe Scheme, 8km to the north west. There is a water licence (#500403) associated with the holding and there are three winter take irrigation allocations associated with three offtake locations on the adjacent title to the east farmed in conjunction. However, there is no water storage capacity other than four minor stock water dams. To utilise the water licence for irrigation during summer, significantly larger storages would need to be constructed. There does appear to be some potential to construct a small irrigation storage(s) (say 10ML each) on the holding, although the contours suggest the sites would not be very efficient. AK Consultants rate the feasibility of constructing a significant irrigation water storages as low due the small catchment area (being on top of the landscape), topography, additional expenses associated with landslide hazard category, slope, clearance requirements, and lack of access.

The holding is a small, relatively isolated holding at the end of a public access road surrounded by native bush and plantation. The holding is run as a small scale beef cattle enterprise. Additional off-farm income is required to supplement the income of the enterprise. Other agricultural holdings to the east, in the vicinity of South Preston, appear to be of a similar scale. These holdings display hobby scale characteristics¹. Agriculture in this area is limited by Land Capability (predominantly growing season limitations); the most likely agricultural activities are beef cattle grazing and plantation. Only with sufficient land area, through farming a number of titles in combination, sufficient scale can be achieved for commercial scale beef cattle or plantation operations as defined by Ketelaar and Armstrong (2012).

The property can be classified as a marginal property, only suitable for sheep and beef cattle grazing. With only approx. 55 ha of usable grazing land, and the need to produce hay and silage for handfeeding of animals during winter (we get snow!), the property is not able of carrying more than 40 cows and followers. This modest scale of production means that the property cannot generate a family income from agriculture. Consequently, we have plans to establish an agri-forestry enterprise (niche timbers) on some of the currently unproductive land for long-term income. We are also hoping to diversify into a farm-based tourism enterprise to supplement the family income in the short to medium term.

Using Zoning Application Guidelines RZ2 and RZ3 (a) and (b), we suggest our property should be considered for inclusion under the "Rural" Zone (Zone 20) in the proposed State-wide Tasmanian Planning Scheme—indeed it is currently zoned "rural". Zone 20 would appear the most suitable as the land has only limited potential for agricultural use due to topography and geology, factors limiting soil productivity, and due to limited water availability.

¹As 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.

In summary, applying Guideline AZ6(e), the Agriculture Zone is not appropriate for the property:

- As can be ascertained from ListMAP (Appendix 1), our property is 95% surrounded by native (conservation) or production forest. The land is very steep in places and retains over 30% native vegetation cover.
- Primary agricultural land use is limited to sheep or cattle grazing and the scale of animal production on the land is not capable of generating a living for a family.
- The only way to make our small property a profitable property in the short to medium term would be to diversify into on-farm tourism. Establishing an agroforestry operation may produce income in decades from now.

The critical impediments to Agricultural land use include:

- extensive bushland areas on steep areas unsuitable for agriculture or grazing,
- extensive rocky areas unsuitable for agriculture
- extensive boggy areas unsuitable for agriculture
- insufficient water resources to support agricultural development
- short growing season due to high altitude

We therefore ask that both titles of our property be included in Zone 20 "Rural Zone".

Yours sincerely,

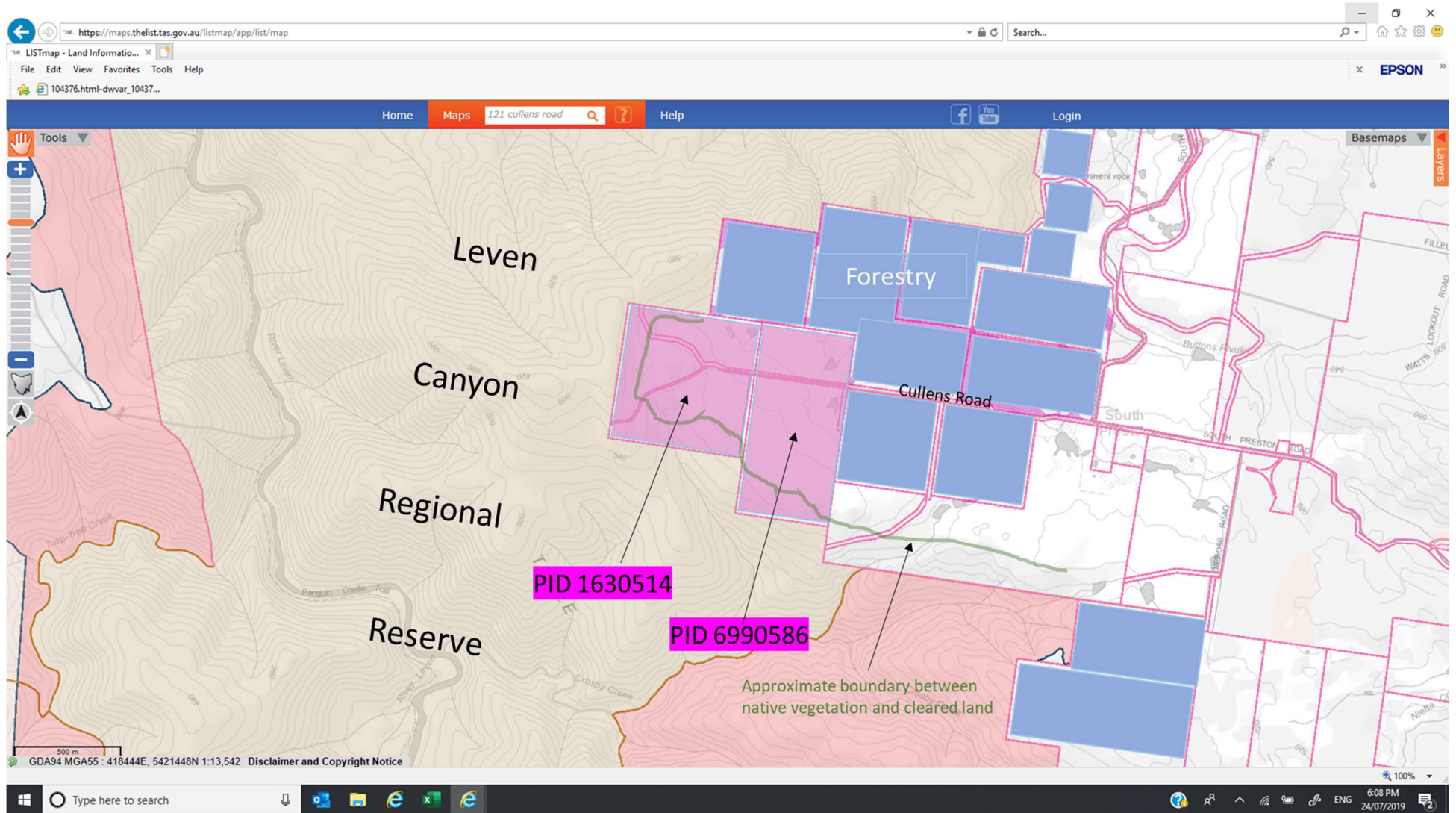


Duncan Chalmers



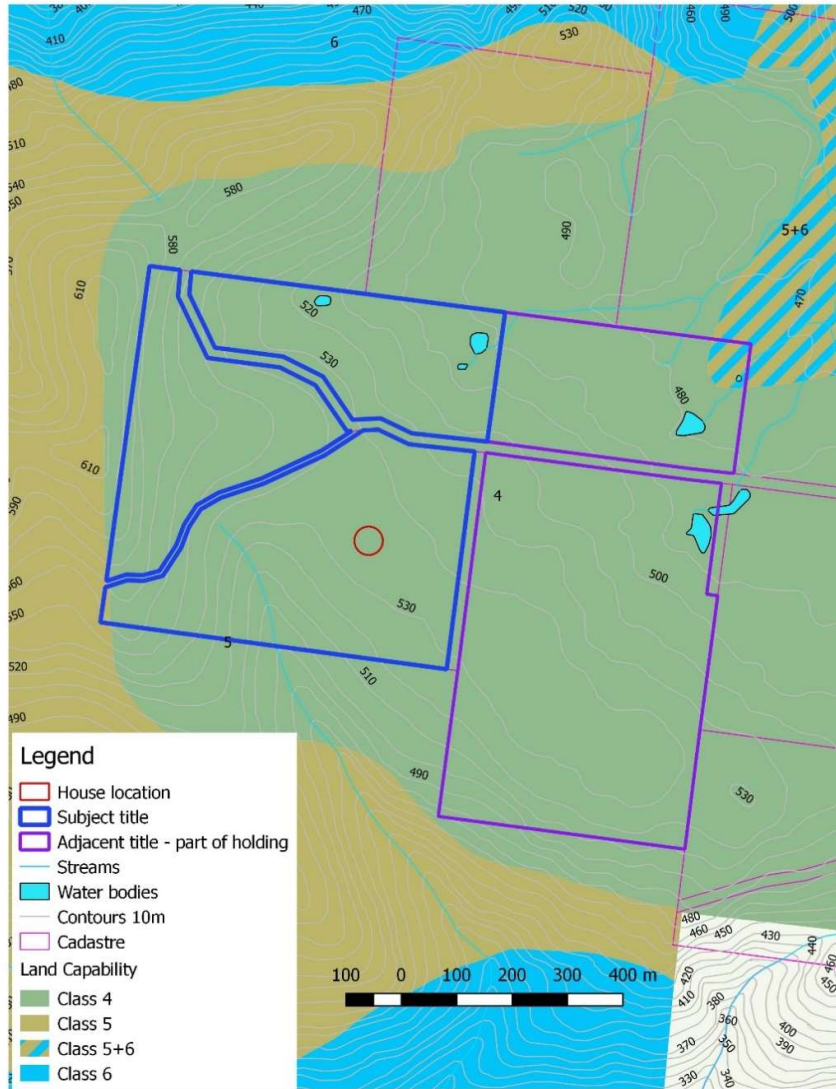
Romy Greiner

Attachment 1: Location map of property 121 Cullens Road, South Preston, showing titles, surrounding properties and land use, elevation and topography



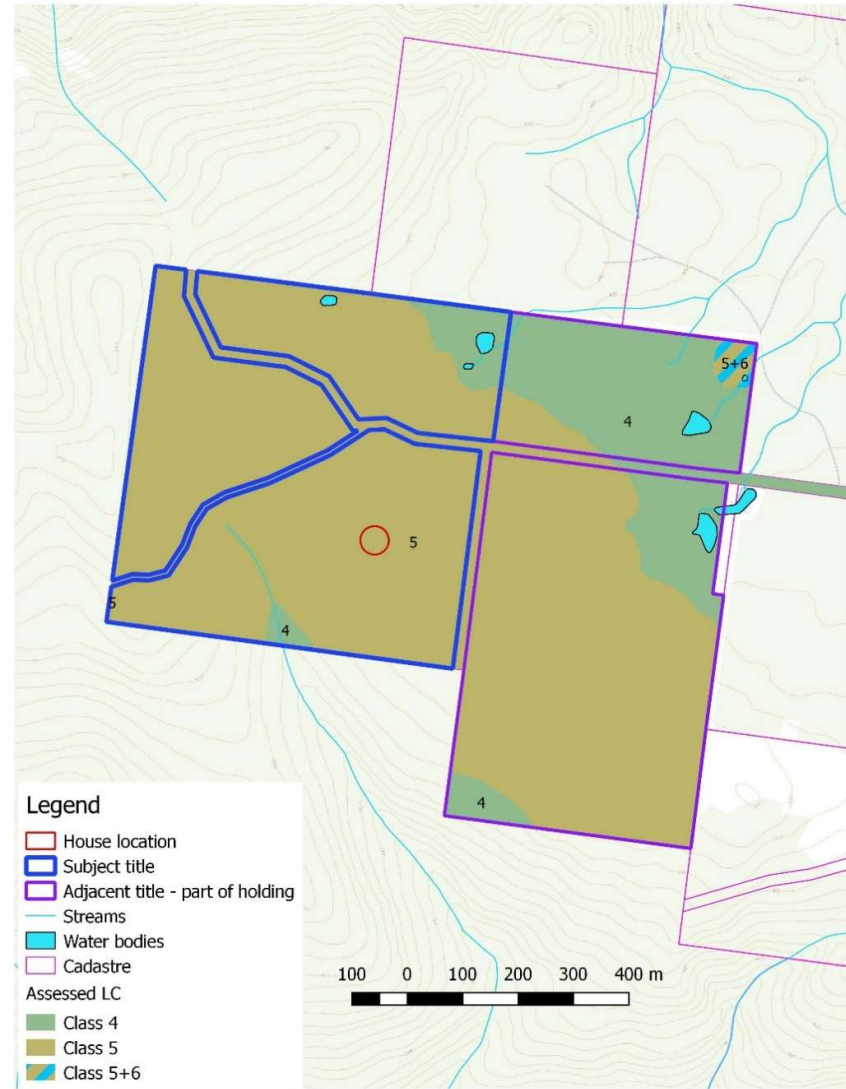
Plantation forestry land use within 1 km from our property Native forest Conservation forest

Attachment 2: Published Land Capability compared to assessed Land Capability for the two titles (based on desktop parameters – altitude; Class 4 below 500m, Class 5 above 500m)



Map Name: Land Capability Published
 Project: Ag Report
 Client: Greiner
 Date: 2/12/19

BaseMap image LIST Topo
 Cadastre, Contours, Streams, Land Capability
 from LIST
 (C) State of Tas



Map Name: Land Capability Assessed
 based on 10m contours
 Project: Ag Report
 Client: Greiner
 Date: 2/12/19

BaseMap image LIST Topo
 Cadastre, Contours, Streams, Land Capability
 from LIST
 (C) State of Tas



Agricultural Assessment Report

Report for: Romy Greiner

Property Location: 121 Cullens Road, Preston (CT 229509/1)

Prepared by: Astrid Ketelaar and Michael Tempest
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Date: 4th December 2019



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SUMMARY

Client:	Romy Greiner
Property identification:	CT 229509/1 (Approximately 40ha), 121 Cullens Rd, South Preston. Farmed in conjunction with the adjacent title (CT 210598/1 also approximately 40ha) Rural Resource Zone, (<i>Central Coast Interim Planning Scheme 2013</i>).
Proposal:	Proposed dwelling extension (greater than 30% of existing floor area) on CT 229509/1.
Purpose:	To assess the agricultural/primary industry aspects of the proposal.
Land Capability:	Published Land Capability at 1:100 000 Class 4 (40ha). Assessed Land Capability (based on altitude limitations) is Class 4 (2ha) and Class 5 (38ha).
Assessment comments:	All relevant information available at desktop level was considered. A site assessment was not considered necessary as the imagery is good and the desktop information correlates with the proponents' information. This report summarises the findings of the desktop assessment.
Conclusion:	The title is approximately 40ha, with approximately 25ha of pasture for grazing. Due to the small area of utilisable land, Land Capability limitations, and lack of a developed irrigation water resource, the agricultural/primary industry potential of the subject title is considered to be relatively small. To realise the agricultural potential of titles with these sort of characteristics they are best farmed in conjunction with other land to achieve economies of scale, as is currently the case. There is further potential to achieve economies of scale through increasing the size of the holding.

The proposed extension to the existing house is on 0.07ha of land that has been converted to domestic use and forms part of the existing curtilage. The loss of this land is considered insignificant in this context.

The proposed setbacks to all boundaries are considered to be sufficient from adjoining titles to minimise the risk of further constraining agricultural/primary industry uses in the vicinity and follow the precedence of existing dwellings' in proximity. It is highly unlikely that the proposed extension on this title will increase the risk of constraining agricultural/primary industry any more than occurs from the existing dwelling on this title.

The proposal complies with the relevant provisions of the *Central Coast Interim Planning Scheme 2013*.

Assessment by:



Astrid Ketelaar, Natural Resource
Management Consultant,
Member, Agricultural Institute
Australia (current)

and



Michael Tempest,
Natural Resource Management
Consultant



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INTRODUCTION

The subject title (CT 229509/1, approximately 40ha) is located at 121 Cullens Road, South Preston. It is farmed in conjunction with the adjacent title to the east CT 210598/1, which is also approximately 40ha. These two titles and surrounding land to the north east and east is zoned as 'Rural Resource' under the *Central Coast Interim Planning Scheme 2013* (the Planning Scheme). Land to the north west, west and south is zoned Environmental Management.

The proponent seeks to gain discretionary approval to extend the existing dwelling on CT 229509/1. The proposed extension is greater than 30% of the existing gross floor area of the house hence the development is a discretionary application and needs to demonstrate it meets the requirements of the Planning Scheme.

The requirements have been discussed with Central Coast Planner Carolyn Harris who advised the following sections of the Planning Scheme are relevant:

26.3.3. P1 Residential Use that is not required as a part of other use.

26.4.3 P1 Location of development for sensitive uses.

Generally, these aspects seek to demonstrate the proposal will not adversely impact;

1. productive agricultural land on the site.
2. or constrain primary industry use surrounding the development.

The productivity of the land affected depends on the current land-use, previous land use and potential land use, size and location of the land affected in relation to the rest of the title / holding, Land Capability, whether there is an irrigation water resource or potential for an irrigation resource and whether the title supports any threatened vegetation or threatened species habitat. Whether the title / holding can be farmed in conjunction with other land also needs to be considered.

Consideration of adjacent agricultural land/primary industry use, not only on the subject title but also on titles in the vicinity, and any decrease in separation distances and potential for the proposed sensitive use to unreasonably interfere with or otherwise constrain adjacent agricultural land/primary industry use, is also required. This can usually be achieved through appropriate buffers and boundary setbacks.

This report summarises the agricultural aspects of the proposal to enable Council to make an informed decision. The specific aspects of the Planning Scheme are addressed in Appendix 2.

DESCRIPTION

The subject title is square, approximately 40ha in area with the existing dwelling situated in the south-eastern quadrant. The dwelling is situated on a relatively flat 160m wide ridgeline running from the centre of the title to the south eastern corner. Land to the north east of the house, slopes to the north east at approximately 11% and land to the south west of the house slopes to the south west at approximately 19%. The majority of the rest of the northern portion of the title has a north easterly aspect and the majority of the southern portion of the title has a southerly aspect. Elevation of the north eastern corner is 490m. The highest point on the western boundary sits at approximately 600m ASL. The house is accessed from Cullens Road, with the driveway extending through the adjacent title from the end of Cullens Road.

Published Land Capability mapping at 1:100 000 scale shows the land to be Class 4. However, Grose (1999) limits Class 4 to an altitude less than 500m ASL. With this limitation applied, all but 2ha in the north eastern corner and a less than 1ha area on the southern boundary, would be Class 5. Given the limitations altitude places on growing seasons and climatic factors it is appropriate to consider the majority of the title as Class 5 rather than Class 4.

Underlying geology is mapped as Cdaid which is described as; massive plagioclase - hornblende phyric dioritic, andesitic and dacitic intrusives (Lobster Creek Intrusives). These are part of the Middle-Late Cambrian Volcanic and volcano-sedimentary sequences Super Group (LIST). There are no mining leases in proximity, there are however, several 'mineral occurrences' recorded. The closest of these is 'Crosby Creek' approximately 1.5km south east of the existing dwelling. Imagery indicates there has been no recent mining activity of any scale at the location of this record or within 1km of the proposed house extension.

The north eastern two thirds of the title is mapped by Tasveg 3.0 as agricultural farmland (FAG) and there is approximately 25ha of pasture on the title. The land in proximity to the western and southern boundaries is covered in native vegetation which the Forest Groups layer on The LIST identifies as 'ETF' (Tall Eucalypt Forest) to the north west and south east, and 'ONF' (Other Native Forest) to the south west. The Forest Groups layer is derived from forestry data that assesses forests by height and crown density. TasVeg 3.0 maps the 'ETF' vegetation communities as *Eucalyptus obliqua* forest over rainforest (WOR) and wet eucalypt forest and woodland (WOU) and the 'ONF' as *Acacia dealbata* forest (NAD). There are also two small areas of remnant vegetation (NAD and WOU) in the pasture areas. None of these vegetation communities are listed as threatened communities under the *Nature Conservation Act 2002* or listed as Priority Habitat under the Planning Scheme. The ETF may have timber values, however, the extent is relatively small (approximately 5ha on the subject title and another 5ha on the adjacent title farmed in conjunction). There are two records for threatened fauna species within 500m of the proposed extension (the LIST). Both are for a wedge-tailed eagle, however, these are for sightings and not nests. There are no records for threatened flora species either on the subject title or in proximity to the holding. There is no recorded threatened vegetation in proximity to the subject title. The nearest recorded threatened vegetation community is riparian scrub (SRI) which is adjacent to the Leven River, 1.8km to the west.

Under the Planning Scheme overlay the majority of the south western corner of the title is within the 'low' hazard band for landslip, with small areas in the south western corner in the 'medium' hazard band.

The title and land in proximity is not within an Irrigation District. The nearest Irrigation Districts are the Kindred North Motton Irrigation Scheme, 15km to the north east, and the Dial Blythe Scheme, 8km to the north west. The title is situated within the Leven catchment. Two headwater streams of Leven River tributaries originate on the subject title; one flows to the north and is an unnamed tributary of Buttons Rivulet and one flows to the south and is an unnamed tributary of Crosby Creek. These tributaries are Class 4 streams under the *Forest Practices Code 2015* because their catchment area is less than 50ha. The proposed extension is more than 40m from these streams.

According to DPIWE's Water Information System of Tasmania (WIST) there is a water licence (#500403) associated with the holding and there are three winter take irrigation allocations associated with three offtake locations on the adjacent title to the east farmed in conjunction; 48ML at Surety 5, 16ML at Surety 6, and 26ML at Surety 5. Each of the offtake locations are located on the property boundary with the intention of maximising the available yield which could be captured in a storage. Surety 5 water is expected to be available eight years out of ten and Surety 6, approximately six to seven years out of ten. Each of these allocations has a small registered dam (between 1 and 2 ML) located upstream from the offtake location. There is also an additional small stock dam on the subject title's northern boundary which does not have an allocation. To utilise the irrigation water for summer, larger storages would need to be constructed. There does appear to be some potential to construct a small irrigation storage(s) (say 10ML each) on the holding, although the contours suggest the sites would not be very efficient.

There is also likely to be winter take irrigation allocations available from the unnamed tributary flowing to the south, however, the feasibility of constructing a storage for this is low due to additional expenses associated with landslide hazard category, slope, clearance requirements, and lack of access.

The Groundwater Information Access Portal (available on line at wrt.tas.gov.au/groundwater-info/) indicates there are no bores present on the property. The nearest bore in the vicinity of the property is Bore no. 17717, which is registered as 30.5m deep with a flow rate of 0.25L/s. This bore is 1.4km to the east. There are two other low yielding bores in proximity to South Preston. These three bores are registered as 'functioning' and they are most likely used for stock and domestic use. Generally the accuracy of the bore register is unreliable and should only be referred to as indicative of bore locations and yields, however the data available from the Groundwater Access Portal database suggests groundwater is not a feasible alternative as an irrigation water source.

The subject title (CT 229509/1, approximately 40ha) is farmed in conjunction with the adjacent title to the east (CT 210598/1), which is also approximately 40ha. Private freehold titles, surrounding the approximately 80ha holding, on the northern and eastern boundaries range in size from 21ha to the north, to 75ha to the south east. Three of these four adjacent titles are owned by the Trust Company and utilised for plantation. All the plantation titles are under Private Timber Reserves. The closest of these is more than 400m to the north of the proposed extension. The title adjacent to the south eastern corner of the holding is the only adjacent title with pasture. The subject land and surrounding land to the north east and east is zoned as 'Rural Resource' under the *Central Coast Interim Planning Scheme 2013* (the Planning Scheme). Land to the north west, west, and south is zoned 'Environmental Management' and is the Leven Canyon Regional Reserve managed by Parks and Wildlife. The closest reserve boundary is more than 130m to the south of the proposed house extension.

The holding is a small, relatively isolated holding at the end of a public access road surrounded by native bush and plantation. The holding is run as a small scale beef cattle enterprise. Additional off-farm income is required to supplement the income of the enterprise. Other agricultural holdings to the east, in the vicinity of South Preston, appear to be of a similar scale. These holdings display hobby scale characteristics¹. Agriculture in this area is limited by Land Capability (predominantly growing season limitations); the most likely agricultural activities are beef cattle grazing and plantation. With sufficient land area, through farming a number of titles in combination, sufficient scale can be achieved for commercial scale beef cattle or plantation operations as defined by Ketelaar and Armstrong (2012).

Under the new State-wide Planning Scheme, the Department of Justice *Agricultural Land Mapping Project* (ALMP) shows the title as 'constrained 2B' and in the Agricultural Zone. The *Agricultural Land Mapping Project* 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 aimed 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.

In this instance, the analysis tool would have identified that the subject title is less than the minimum area for the most suitable enterprises, is not adjacent to a commercial size title, has a capital value of <\$50,000/ha and is not adjacent to a residential zone, so would have mapped the title as 'constrained 2B'.

The Local Provision Schedule for the Central Coast Planning Scheme area was advertised 11th June – 9th August 2019 and due to a representation put forward by the land owners of the holding (Greiner and Chalmers), the Central Coast Council recommendation is for these two titles to be zoned 'Rural' rather than 'Agriculture' as per Annexure 1 of the Central Coast Section 35F Report to the Planning Commission, available for download at <https://www.centralcoast.tas.gov.au/draft-central-coast-lps/>. The Tasmanian Planning Commission have yet to make a decisions on this.

¹As 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.

DISCUSSION

The proposal is to extend the existing house to the north. The extension is within the curtilage of the existing garden fence (approx. 6m between the fence and the extension). This is a diagonal fence; originally the fenceline was squared off E-W. It was altered in 2016 when the proponents purchased the property. The garden was extended for aesthetic purposes. The portion of the paddock that was converted for aesthetic purposes is approximately 0.07ha.

Land to the north of the proposed extension has been used for pasture and fodder conservation since 2010. The southern portion of the paddock to the west of the proposed extension has recently been established as a mixed orchard for domestic use. This is within 38m of the house extension and on the same title. The orchard is managed using organic principles. The paddock to the east of the extension is a domestic vegetable and berries planting. Land to the south east in association with some remnant paddock trees is utilised for horses. The closest boundary to the extension is to the east; the road reserve is 174m from the extension and the adjacent title (also owned by Greiner & Chalmers) is 194m from the proposed extension. The closest plantation activity in proximity to the proposed extension is to the north, more than 400m distance. The closest pasture based enterprise on land not owned by the proponent is more than 700m to the south east.

The proposed extension is on land not utilised for agriculture. Whilst this land once was, and presumably could again be utilised for agriculture, assuming there is no permanent changes to the soil characteristics, the house extension would permanently convert this land. However, the loss of this land is considered irrelevant in the context of the existing and potential productivity of the holding and grazing enterprise.

The title has no potential to be utilised for a 'viable'² agricultural or primary industry enterprise in its own right due to the existing limitations of size, Land Capability, and the presence of an existing dwelling. Whilst the productivity of land with these characteristics is normally best realised if farmed in conjunction with other land, as is currently the case, the size of the land holding is still too small for a commercial scale enterprise. There are, however, no limitations to farming the land in conjunction with other land to the north east, east and south east to enable further economies of scale. The most likely agricultural enterprises in the area are plantation and pasture based enterprises. Areas of 200ha or more are likely to be required to achieve commercial scale for these sorts of enterprises. Surrounding private freehold land to the north east and east is relatively unconstrained by non-farming development, for agricultural use, hence it should be feasible to achieve farming a number of titles in conjunction to achieve commercial for enterprises suitable for the area.

The subject title has not been developed for irrigation although there are irrigation allocations associated with the holding. It would be difficult to achieve a return on investment in irrigation development for a pasture based enterprise on land with these limitations. If irrigation resources were developed on the title, or adjacent title which forms part of the holding, the maximum available water would be 90ML (assuming suitable storages can be constructed) which would be sufficient to

² In our opinion a viable farm is one producing sufficient income to provide for a family and provide full time employment for one person. On this basis the long-term viability of farms producing less than \$200,000 Gross Income is questionable.

irrigate 18ha at 5ML/ha. This is more likely to occur to the north of the driveway (on the same title 150m north of the proposed extension) and/or to the east of the road reserve as these areas would be closer to the storage dams. Irrigable land in these directions is 194m distance from the proposed extension and on land currently owned by the proponent. The nearest actual irrigation is more than 2km distant to the east of the proposed extension. The prevailing wind is from the west and the proposed extension is south and east of any of this potential intensification. There is scope to include a vegetated buffer on the subject title to further mitigate the risk of any impacts on residential amenity from adjacent potential agricultural activity to the north and east.

With the commercial scale forestry holding to the east, there is some potential that the eastern portion of the holding (CT 210598/1) would be attractive for plantation. In that case the proposed extension would still be 194m from any potential plantation activity and potential Private Timber Reserve.

The Tall Eucalypt Forest on the holding has some potential for native forest harvesting and regeneration, however, the area available on the title is approximately 4-5ha and the area available on the holding is 8-10ha. A native forest harvesting and regeneration operation less than 10ha is likely to be of very low economic return unless harvested in conjunction with other areas in close proximity. There is little scope for this with the majority of the adjacent land being either reserves or plantation.

The Rural Resource Zone Requires a 200m setback for sensitive uses from adjacent titles. The eastern boundary is approximately 174m from the road reserve and 194m from the adjacent title east of the road reserve. Although this adjacent eastern title is currently under the same ownership, this may change in future. The current use on this land is beef cattle grazing. The most likely future use is also beef cattle grazing, although there is some potential for plantation and also irrigation if the title were to be farmed in conjunction with other land. There are a range of activities associated with plantation, grazing and cropping, and 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 agricultural/primary industry activities (see Appendix 4. Table 3). 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 (irrigation equipment, tractors, harvesters, aircraft etc. including during the night and early morning), irrigation water spray drift (generally not potable water), odour from fertilisers and chemicals, and dust during harvesting and ground preparation. The types of activities associated with irrigated cropping which may affect residential amenity are generally much more frequent and of greater concern than activities associated with hobby scale grazing activities. These are generally limited to fertiliser spreading, perhaps weed spraying and fodder conservation, and occasional cultivation and re-sowing of pastures.

The Western Australia Department of Health (DOH, 2012) has published guidelines relating specifically to minimising conflict between agricultural/primary industry 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 existing house is 158m from the road reserve to the east and 178m from the agricultural activity on the adjacent title to the east, hence a precedence for a reduced setback has already been established.

Given there is scope for a vegetated buffer between the proposed extension and any adjacent use in these directions and the prevailing wind is from the west the separation distance is considered adequate to mitigate the risk of the proposed extension constraining agricultural/primary industry operations in the vicinity.

The proposal has been assessed against the relevant provisions of the *Central Coast Interim Planning Scheme 2013* (See Appendix 2). In my opinion the proposed extension complies with the relevant provisions of the *Central Coast Interim Planning Scheme 2013*.

CONCLUSION

The title is approximately 40ha, with approximately 25ha of pasture for grazing. Due to the small area of utilisable land, Land Capability limitations, and lack of a developed irrigation water resource, the agricultural/primary industry potential of the subject title is considered to be relatively small. To realise the agricultural potential of titles with these sort of characteristics they are best farmed in conjunction with other land to achieve economies of scale, as is currently the case. There is further potential to achieve economies of scale through increasing the size of the holding.

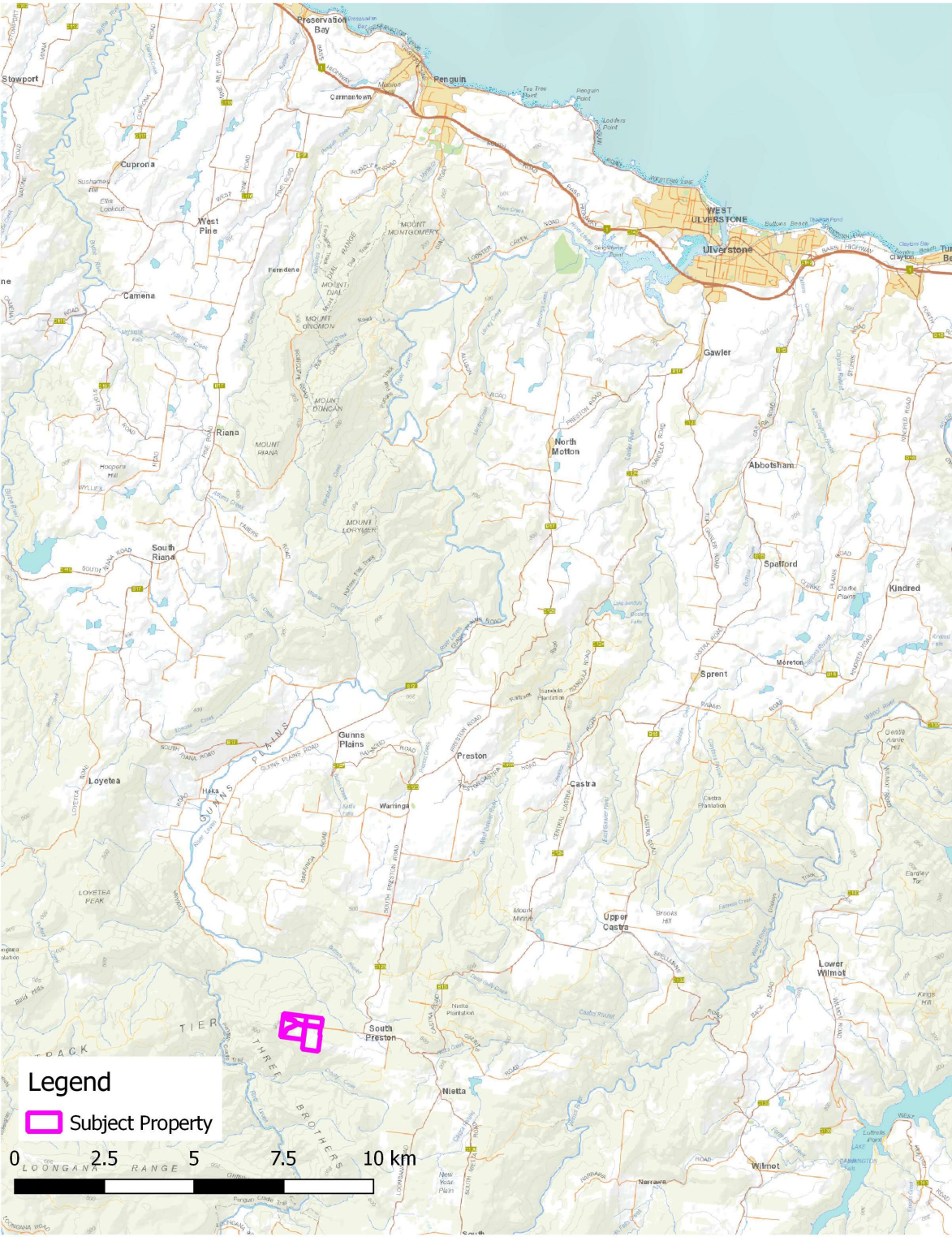
The proposed extension to the existing house is on 0.07ha of land that has been converted to domestic use and forms part of the existing curtilage. The loss of this land is considered insignificant in this context.

The proposed setbacks to all boundaries are considered to be sufficient from adjoining titles to minimise the risk of further constraining agricultural/primary industry uses in the vicinity and follow the precedence of existing dwelling. It is highly unlikely that the proposed extension on this title will increase the risk of constraining agricultural/primary industry any more than occurs from the existing dwelling on this title.

The proposal complies with the relevant provisions of the *Central Coast Interim Planning Scheme 2013*.

REFERENCES

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Map Name: Location
Project: Ag Report
Client: Greiner
Date: 2/12/19

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



Figure 1. Location. Two titles with existing house on Topo



Figure 2. Aerial Image with existing house

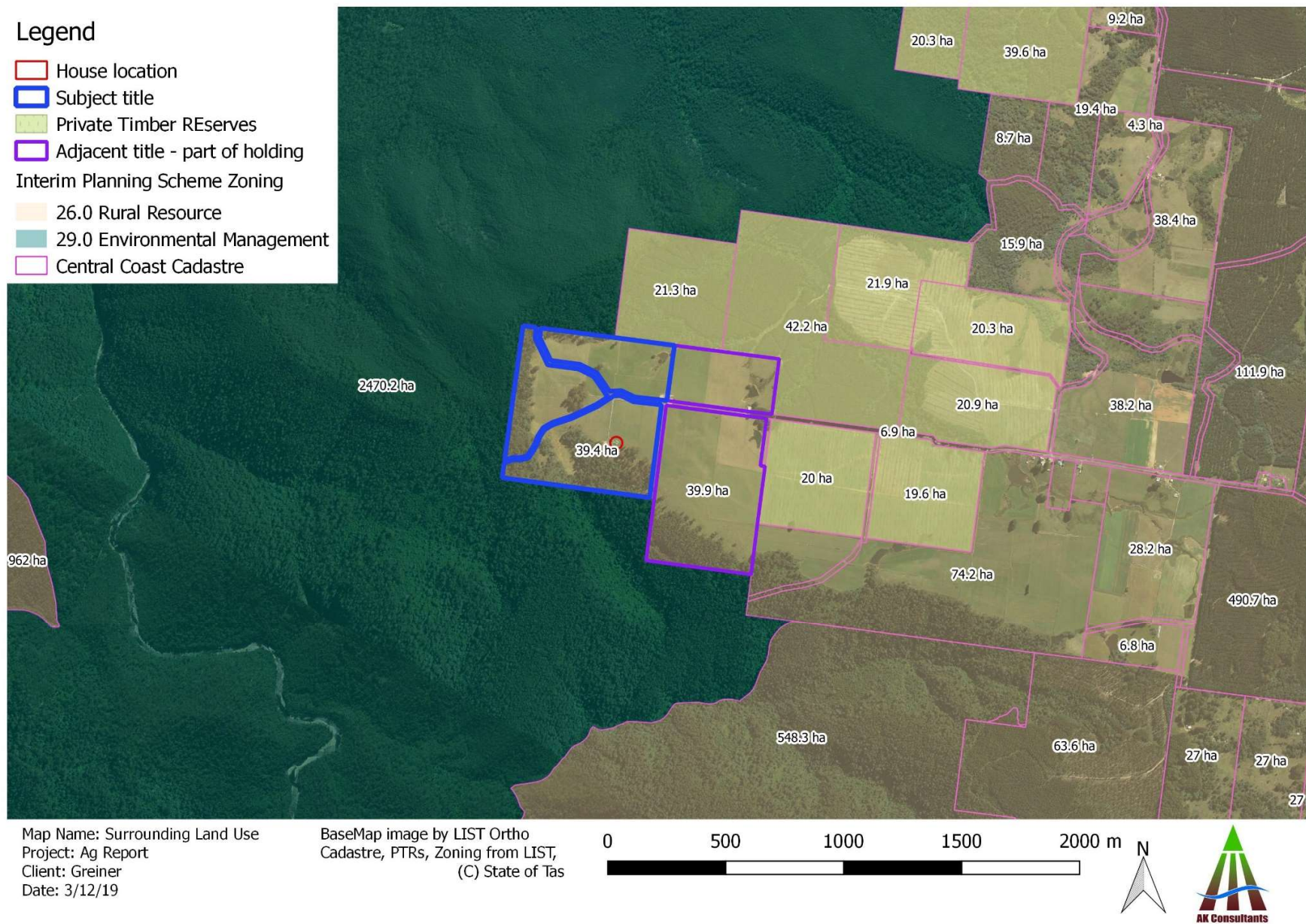
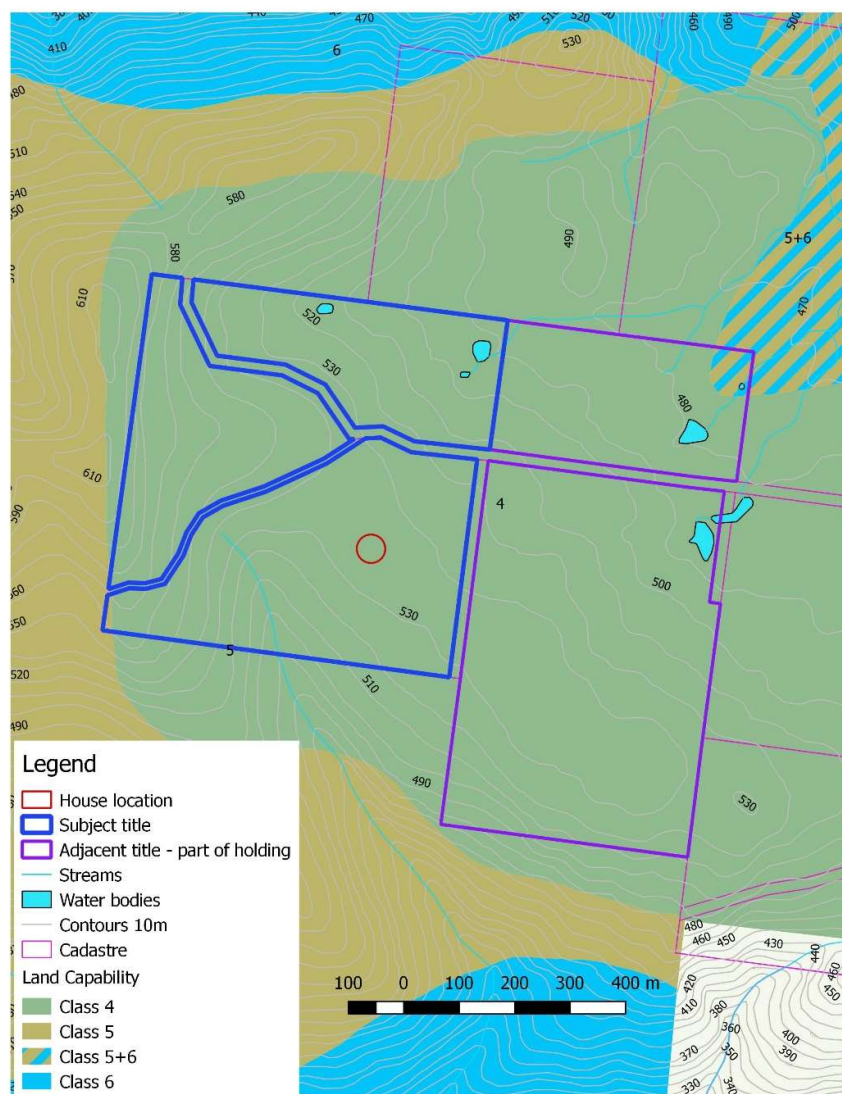
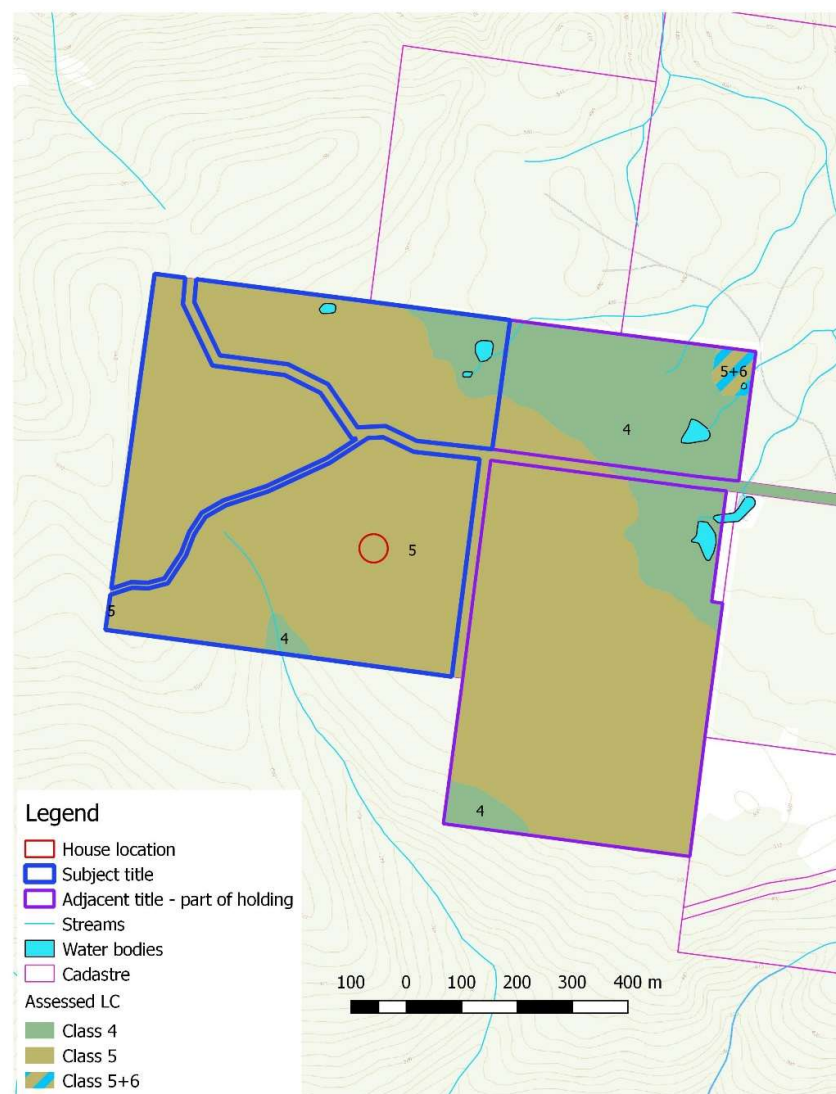


Figure 3. Surrounding Titles and zoning over aerial image



Map Name: Land Capability Published
 Project: Ag Report
 Client: Greiner
 Date: 2/12/19

BaseMap image LIST Topo
 Cadastre, Contours, Streams, Land Capability
 from LIST
 (C) State of Tas



Map Name: Land Capability Assessed
 based on 10m contours
 Project: Ag Report
 Client: Greiner
 Date: 2/12/19

BaseMap image LIST Topo
 Cadastre, Contours, Streams, Land Capability
 from LIST
 (C) State of Tas



Figure 4. Published Land Capability compared to assessed Land Capability for the two titles (based on desktop parameters – altitude; Class 4 below 500m, Class 5 above 500m).

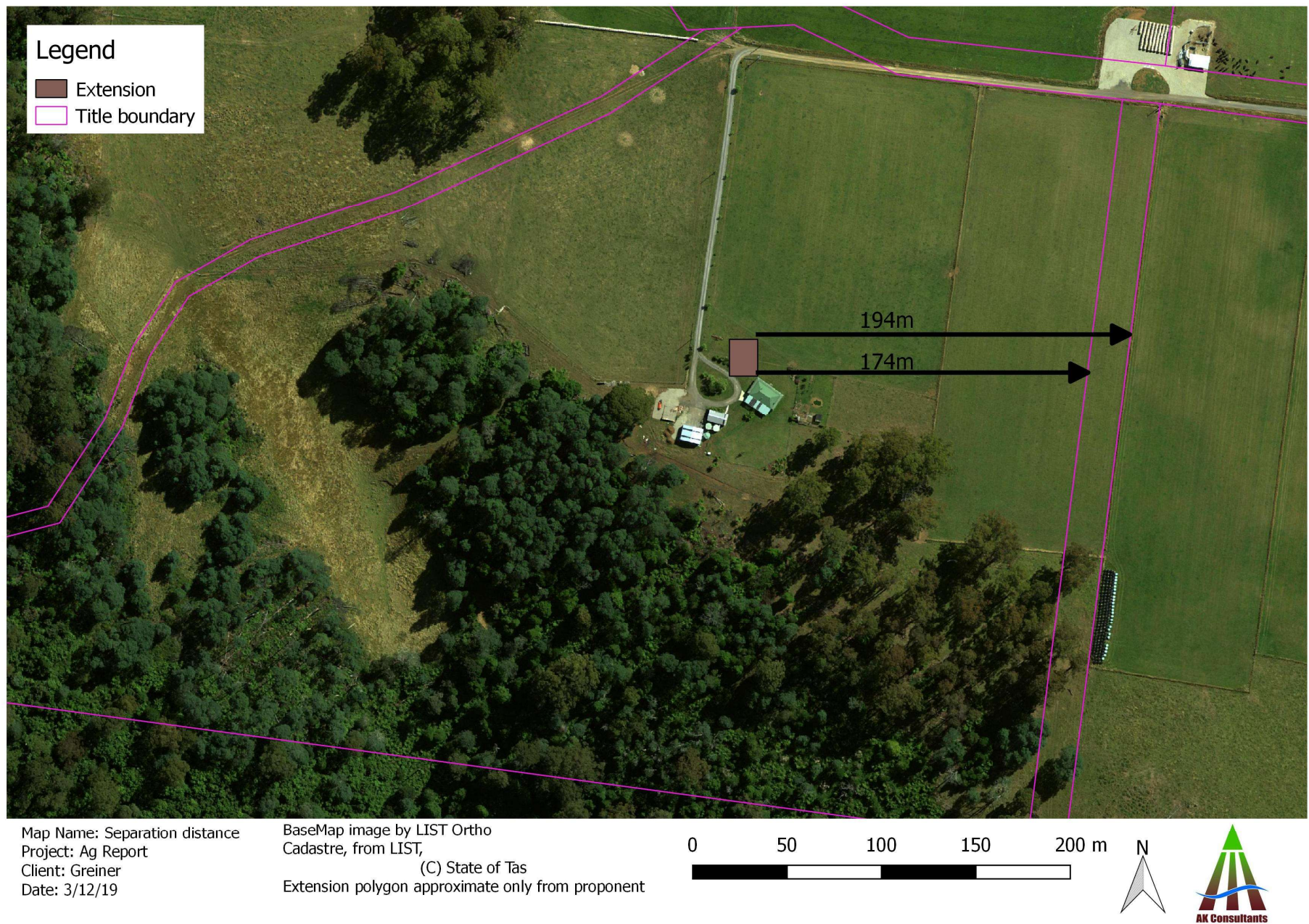


Figure 5. Showing Proposed extension and distances to road reserve to the east and neighbouring pasture to the SE on the adjacent title

26.0 RURAL RESOURCE ZONE

26.1.2 Local Area Objectives

- (a) The priority purpose for rural land is primary industry dependent upon access to a naturally occurring resource;
- (b) Air, land and water resources are of importance for current and potential primary industry and other permitted use;
- (c) Air, land and water resources are protected against –
 - (i) permanent loss to a use or development that has no need or reason to locate on land containing such a resource; and
 - (ii) use or development that has potential to exclude or unduly conflict, constraint, or interfere with the practice of primary industry or any other use dependent on access to a naturally occurring resource;
- (d) Primary industry is diverse, dynamic, and innovative; and may occur on a range of lot sizes and at different levels of intensity;
- (e) All agricultural land is a valuable resource to be protected for sustainable agricultural production;
- (f) Rural land may be used and developed for economic, community, and utility activity that cannot reasonably be accommodated on land within a settlement or nature conservation area;
- (g) Rural land may be used and developed for tourism and recreation use dependent upon a rural location or undertaken in association with primary industry
- (h) Residential use and development on rural land is appropriate only if –
 - (i) required by a primary industry or a resource based activity; or
 - (ii) without permanent loss of land significant for primary industry use and without constraint or interference to existing and potential use of land for primary industry purposes

The proposed extension does not alter the continued profitable use of rural land for primary industry (beef cattle grazing) dependent upon access to the land and water resources on the title and thus does not contravene (a)
The proposed extension will permanently convert 0.07ha of Class 5 land that has previously been utilised for grazing and fodder crops. This land has already been converted to domestic use. The loss of this land is considered insignificant. There will be no impact on air, or water resources that contribute to the growth of existing or future primary industry uses. All air, land, and water resources will continue to operate as they currently do, complying with (b) and (c) and (e).

All aspects of existing and potential primary industry use have been considered and the proposal does not impact on the existing or future potential of the primary industry activities of the title and thus does not contravene (d).

(f) & (g) & (h)(i) - N/A

(h)(ii) the proposed extension results in the permanent loss of 0.07ha of Class 5 land. This loss is considered insignificant for primary industry use. The proposed extension does not constrain or interfere with existing and potential use of land for primary industry purposes, as the house is existing and the proposed extension is within the existing curtilage. Also there are appropriate separation distances between the extension and adjacent existing and potential primary industry use.

The development is therefore consistent with the relevant Local Area Objectives.

26.1.3 Desired Future Character Statements

Use or development on rural land –

- (a) may create a dynamic, extensively cultivated, highly modified, and relatively sparsely settled working landscape featuring –
 - (i) expansive areas for agriculture and forestry;
 - (ii) mining and extraction sites;
 - (iii) utility and transport sites and extended corridors; and
 - (iv) service and support buildings and work areas of substantial size, utilitarian character, and visual prominence that are sited and managed with priority for operational efficiency
- (b) may be interspersed with –
 - (i) small-scale residential settlement nodes;
 - (ii) places of ecological, scientific, cultural, or aesthetic value; and
 - (iii) pockets of remnant native vegetation

- (c) will seek to minimise disturbance to –
 - (i) physical terrain;
 - (ii) natural biodiversity and ecological systems;
 - (iii) scenic attributes; and
 - (iv) rural residential and visitor amenity;
- (d) may involve sites of varying size –
 - (i) in accordance with the type, scale and intensity of primary industry; and
 - (ii) to reduce loss and constraint on use of land important for sustainable commercial production based on naturally occurring resources;
- (e) is significantly influenced in temporal nature, character, scale, frequency, and intensity by external factors, including changes in technology, production techniques, and in economic, management, and marketing systems.

The proposed extension development is consistent with the Desired Future Character Statements as there is an existing residential use. The proposed extension does not alter the character of the use of the land.

26.2 Use Table

The proposal is for extending the existing house more than 30% of the existing floor area and therefore requires discretionary assessment.

26.3 Use Standards

26.3.3 Residential use

Objective:

Residential use that is not required as a part of other use –

- (a) minimises the permanent and unnecessary loss of land with potential for resource development or an extractive industry; and
- (b) minimises likelihood to interfere with or constrain the existing or potential use of land for resource development or an extractive industry

Acceptable Solutions

A1

Residential use that is not required as part of an other use must –

- (a) be an alteration or addition to an existing lawful and structurally sound residential building;
- (b) be an ancillary dwelling to an existing lawful and structurally sound single dwelling;
- (c) not intensify an existing lawful residential use;
- (d) not replace an existing residential use;
- (e) not create a new residential use through conversion of an existing building;
- (f) be an outbuilding with a floor area of not more than 100m2 appurtenant to an existing lawful and structurally sound residential building; or
- (g) be home based business in association with occupation of an existing lawful and structural sound residential building; and
- (h) there is no change in the title description of the site on which the residential use is located -

Performance Criteria

P1

Residential use that is not required as a part of other use must –

- (a) be consistent with local area objectives;
- (b) be consistent with any applicable desired future character statement;
- (c) be on a site within which the existing or proposed development area –
 - (i) is not capable by reason of one or more of factors of topography, resource capability, size or shape of being utilised for resource development or extractive industry use; and
 - (ii) is not capable of utilisation in the operations of a resource development or extractive industry enterprise, regardless of ownership; and
 - (iii) does not constrain or interfere with existing or potential resource development or extractive industry use of land including the balance area on the site.
- (d) not be likely to impose an immediate demand or contribute to a cumulative requirement for public provision or improvement in reticulated or alternate arrangements for utilities, road access, or community service.

Assessment:

P(1)(a) and (b) See 26.1.2 and 26.1.3 for assessment against the Local Area Objectives and the Desired Future Character Statements. The expansion of the residential use simply seeks to increase the living space for the existing family that currently resides there.

P(1)(c)(i)-(iii) The proposal permanently converts 0.07ha of land which is currently used for domestic garden and which has previously been utilised for primary production. The fact that it has been converted to domestic use indicates it is 'not capable of being utilised for resource development use'. It could be argued that it could be converted back to primary production, but this seems highly unlikely under the current ownership. If ownership changed new fences would need to be installed to convert the 0.07ha back to primary production and residential amenity would also decrease as a result. This also seems unlikely given the small area involved and resultant gains in primary production vs the cost of re-instating the fence along its original alignment. The proposed extension is within the existing curtilage of the existing house and whilst there is only 6m separation between the proposed extension and the adjacent paddock to the north, the adjacent paddock to the north is on the same title and under the same ownership and hence management is under the control of the occupants of the house. The 6m separation distance is no different to the separation distance that existed prior to the fence re-alignment and expansion of the curtilage in 2016. The curtilage was extended for aesthetic reasons and not due to primary production operational factors interfering with residential amenity. Prevailing winds are from the west, hence, it is unlikely that the management of the paddock to the north would alter as a result of the extension. Therefore, the extension does not constrain or interfere with the existing or potential resource development of land including the balance area on the site.

P1(d) There is an existing dwelling on the site, therefore there will be no increase in demand or requirement for public provision or improvement in reticulated or alternate arrangements for utilities, road access, or community service.

26.4 Development Standards

26.4.3 Location of development for sensitive uses

Objective:

The location of development for sensitive uses on rural land does not unreasonably interfere with or otherwise constrain –

- (a) agricultural land for existing and potential sustainable agricultural use dependent on the soil as a growth medium;
- (b) agricultural use of land in a proclaimed irrigation district under Part 9 Water Management Act 1999 or land that may benefit from the application of broad-scale irrigation development;
- (c) use of land for agricultural production that is not dependent on the soil as a growth medium, including aquaculture, controlled environment agriculture, and intensive animal husbandry;
- (d) conservation management;
- (e) extractive industry;
- (f) forestry; and
- (g) transport and utility infrastructure

Acceptable Solutions

A1

New development, except for extensions to existing sensitive use where the extension is no greater than 30% of the existing gross floor area of the sensitive use, must –

- (a) be located not less than –
 - (i) 200m from any agricultural land;
 - (ii) 200m from aquaculture or controlled environment agriculture;
 - (iii) 500m from the operational area boundary established by a mining lease issued in accordance with the Mineral Resources Development Act 1995 if blasting does not occur; or

Performance Criteria

P1

New development, except for extensions to existing sensitive use where the extension is no greater than 30% of the existing gross floor area of the sensitive use, must minimise –

- (a) permanent loss of land for existing and potential primary industry use;
- (b) likely constraint or interference to existing and potential primary industry use on the site and on adjacent land;
- (c) permanent loss of land within a proclaimed irrigation district under Part 9 Water Management Act 1999 or land that may benefit from the application of broad-scale irrigation development; and

- (iv) 1000m from the operational area boundary established by a mining lease issued in accordance with the Mineral Resources Development Act 1995 if blasting does occur; or
- (v) 500m from intensive animal husbandry;
- (vi) 100m from land under a reserve management plan;
- (vii) 100m from land designated for production forestry;
- (viii) 50m from a boundary of the land to a road identified in Clause 26.4.2 or to a railway line; and
- (ix) clear of any restriction imposed by a utility; and
- (b) not be on land within a proclaimed irrigation district under Part 9 *Water Management Act* 1999 or land that may benefit from the application of broad-scale irrigation development

Assessment:

As the proposed extension expands the floor area of the residential use by more than 30% and the extension is proposed to be located less than 200m from the adjacent title to the east, the proposal is reliant on the performance criteria.

P1(a) The proposed extension will result in the permanent loss of 0.07ha of land for existing and potential primary industry use. This land has been converted to domestic use and is part of the curtilage for the existing house. It is doubtful that it would ever be brought back in to productive primary industry use due to its proximity to the existing dwelling. As the proposed extension is within the existing curtilage the loss of land for potential primary industry use is minimal.

P1(b) The proposed extension does not increase the likely constraint or interference to existing and potential primary industry use on the site any more than the existing dwelling. Proximity to the primary industry use is 6m which is the same separation distance as the previous fence alignment which was altered in 2016. The fence alignment was altered for aesthetic purposes and not to increase the separation distances between the primary production use and the residential use. As this primary production use is on land under the same ownership as the proponents of the house extension, no conflict is anticipated. There is sufficient separation distance and capacity to provide for vegetated buffers on the title between the proposed extension and adjacent existing and potential land use on adjacent land to minimise the risk of constraint or interference to existing and potential primary industry use on adjacent land.

P1(c) & P1(d) N/A

APPENDIX 3. LAND CAPABILITY DEFINITIONS FROM GROSE (1999)³

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.

³ Highlighted colour of Class corresponds with LIST Land Capability Class colours.

APPENDIX 4. POTENTIAL CONFLICT ISSUES

Tables 1 and 2 describe the frequency and intensity of adjacent primary industry 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 these specific issues associated with these activities Learmonth et. al. (2007) also provides a comprehensive list of potential land use conflict issues (see Table 3). Tables 1 and 2 provide the rationale behind the recommended minimum buffers contained in Table 4 (Appendix 5).

Table 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 eg 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 2. Farming Activity – 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 3. Typical rural land use conflict

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 vegetation 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).

Appendix 5. Agricultural Enterprises Requirements and Potential Constraints

Table 4 describes the general resource requirements for various agricultural land uses.

Table 4. Resource Requirements for Various Land Uses

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					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
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)

(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.