RMCG

26 APRIL 2022

Farm Management Plan

Report for: Julia Stone

Property Location: 3643 Channel Highway, Birchs Bay (CT

106893/3)

Prepared by: Astrid Ketelaar

RMCG

Level 2, 102-104 Cameron Street

Launceston, TAS 7250

SUMMARY	
Client:	Julia Stone
Property identification:	CT 106893/3 (3.1ha), 3643 Channel Highway, Birchs Bay Rural Resource Zone, (Kingborough Interim Planning Scheme 2015).
Proposal:	Proposed construction of a dwelling.
Purpose:	Farm Management Plan (FMP) to address Clauses 26.3.1 (P1) and 26.3.3 (P1) of the Planning Scheme.
Land Capability:	Published Land Capability at 1:100 000 shows the subject title to be Class 4 (3.1ha). Surrounding land is also Class 4.
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:	It is our opinion that the construction of a dwelling and driveway access on the title does not contravene the agricultural requirements of the Planning Scheme (Clauses 26.3.1 (P1) and 26.3.3 (P1)), as specified in the Further Information request from the Kingborough Council dated 01/02/202. We believe that the title is practically incapable of supporting an agricultural enterprise, on its own, and is reliant on negotiated agreements for access to water resources and to achieve economies of scale for chilling and packing facilities and access to markets.
	The new owners have secured the necessary agreements and there will be a net gain in the number of cherry trees as a result of infill plantings. Amenity impacts on the dwelling as a result of the cherry orchard on the subject land can be managed as the orchard is small and activities can be scheduled to suit the conditions. Sufficient setbacks and buffers can be achieved between the new dwelling and adjacent existing and potential agricultural use, to minimise the risk of constraining agricultural/primary industry activity in the vicinity.
Assessment by:	A.Ketelaar
	Astrid Ketelaar Associate

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1 Introduction

The subject title (CT 106893/3) is located at 3643 Channel Highway, Birchs Bay. This title and all surrounding land is zoned as 'Rural Resource' under the *Kingborough Interim Planning Scheme 2015* (the Planning Scheme).

The proponent seeks to gain discretionary approval to construct a dwelling on the title.

As identified in the Request for Further Information from the Kingborough Council, dated 01/02/2022, Council have requested a Farm Management Plan (FMP) to address Clauses 26.3.1 (P1) and 26.3.3 (P1) of the Planning Scheme. Specifically, the FMP needs to address the impact of the proposed dwelling during and post construction, as well as consider the sustainability and viability of the existing and future agricultural use on the subject title and the surrounding properties.

The following sections of the Planning Scheme are relevant;

26.3.1 (P1) A sensitive use must not unreasonably convert agricultural land or conflict with or fetter non-sensitive use on adjoining land having regard to all of the following:

- a) The characteristics of the proposed sensitive use;
- b) The characteristics of the existing or likely non-sensitive use on adjoining land;
- c) Setback to site boundaries and separation distance between the proposed sensitive use and existing or likely non-sensitive use on adjoining land;
- d) Any characteristics of the site and adjoining land that would buffer the proposed sensitive use from the adverse impacts on residential amenity from existing or likely non-sensitive use.

26.3.3 (P1) A discretionary non-agricultural use must not conflict with or fetter agricultural use on the site or adjoining land having regard to all of the following:

- a) The characteristics of the proposed non-agricultural use;
- b) The characteristics of the existing or likely agricultural use;
- c) Setback to the site boundaries and separation distance between the proposed non-agricultural use and existing or likely agricultural use;
- d) Any characteristics of the site and adjoining land that would buffer the proposed non-agricultural use from the adverse impacts on amenity from existing or likely agricultural use.

The characteristics of the land and the proposal in view of these requirements has been considered. In summary the Planning Scheme requires the dwelling to not convert, confine or restrain existing or potential agricultural use on the site or on adjacent land.

The subject site is utilised for cherry production and an area of the cherry orchard is proposed to be removed as part of the development.

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. The farm manager (Mr Albert Jones) has also been contacted to understand the existing cherry enterprise management regime, including; labour requirements, irrigation water resources, gross income and any site specific issues. This has assisted with understanding how the sustainability and viability of the cherry enterprise will be impacted by the proposed development.

This FMP assesses and summarises the findings of the agricultural/primary industry aspects of the proposal and the requirements of the Request for Further Information.

2 Description

The title is 3.1ha in area and is situated on a moderately sloped (12% - average slope) parcel of land with a south easterly aspect. The highest elevation in the north western corner is approximately 21m above sea level (ASL) while the lowest point in the centre of the southern boundary is approximately 7m ASL.

Published Land Capability mapping at 1:100 000 scale shows the subject land and surrounding land to be Class 4. Class 4 Land Capability is described as land that is well suited to grazing, but which is limited to occasional cropping or a very restricted range of crops (Grose 1999).

In 2021 a site specific soil assessment for the proposed dwelling foundations was conducted by Doyle Consulting. The Foundation Assessment Report (Doyle 2021) indicates a duplex soil with a dark greyish brown sandy silty Clay Loam over a mottled yellowish brown fine sandy light Clay. Underlying geology is Jurassic dolerite with locally developed granophyre (Mineral Resources Tas 1:50 Kingborough sheet cited in Doyle 2022). The profiles confirm drainage is the main limiting factor and the limitations are consistent with a Class 4 Land Capability. There is no mining associated with the title, and there are no mining leases in the vicinity. The nearest mining list is more than 7km distance.

The majority of the title is mapped by TASVEG 4.0 as agricultural farmland (FAG). Imagery shows a cherry orchard occupies the majority of the title. The extent of the orchard is approximately 2.67ha (measured on LIST imagery), however, there have been some diseased rows removed and there is also an existing row of poplars.

Vegetation on the adjacent foreshore to the east and south is mapped as *Eucalyptus obliqua* dry forest and the mapping suggests this extends on to the subject title in the south, however imagery (LIST) indicates there is no native vegetation on the subject title. The foreshore community is not listed as a threatened community under the Nature Conservation Act 2002, however, it is listed as Biodiversity Protection area under the Planning Scheme. There are no records of any threatened flora or fauna species associated with the title (the LIST), although there are several records for Tasmanian devil in close proximity as well as a white bellied sea eagle record. A small section of the title in the south has a 'low' landslip hazard band associated with it.

The Planning Scheme Code Overlays which are relevant to the Planning Application are Biodiversity Protection, Water way and Coastal Protection, Scenic Landscape, Bushfire Prone (Designful 2021).

Average annual rainfall is 900mm (Woodbridge 94068 BoM). The title is situated at Green Patch Point, adjacent to the D'Entrecasteaux Channel. There are no streams or water courses associated with the title. The nearest water courses are 85m to the north and 82m to the south and a further 300m to the south. Nearby, there are 5 small, registered dams and there are six winter take surety 5 allocations on Water Licence 500113 with a total of 23.3ML. These are all associated with the adjacent title to the west on land owned by KMR Australia Pty Ltd.

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The Department of Natural Resources and Environment Water Assessment Tool was used to determine if there is any additional yield available from these streams. This tool is used as a guide for determining surface water availability at a given location. The tool was run at the catchment outlet for the stream to the north and the two streams to the south.

Table 2-1: Available Yields

LOCATION OF CATCHMENT OUTLET	SURETY	TOTAL	
	5	6	
Stream to north (E 519586, N 5220262)	5	3	8
Stream to south (E 519416, N 5219871)	1	1	2
Stream further south (E 519416, N5219616)	0	7	7

Surety 5 water is expected to be available eight years out of ten and surety 6 water is expected to be available six years out of ten. The take period for this water is 1st May to 30th Nov. To utilise this water outside the take period it needs to be taken into storage. There does appear to be some potential for KMR Australia Pty Ltd to increase their allocations for winter takes, however exploring the feasibility of this further is outside the scope of this report. Suffice to say the subject land has no feasible stand-alone irrigation water resources and is reliant on off-farm water resources. Currently the irrigation water resources for the cherry orchard on the subject land are sourced from KMR Australia Pty Ltd. The subject title is not within an irrigation district.

The LIST Groundwater Bore Holes and Features shows a single bore approximately 140m to the south. This bore is registered as 'abandoned'. Whilst the accuracy of the Groundwater Bore Holes and Features can not be guaranteed the information available suggests groundwater is not a feasible irrigation water resource.

The subject land is in a coastal rural setting with small titles. The predominant agricultural uses are horticultural (cherries, hazelnuts and apples) and grazing. All surrounding titles are in the Rural Resource zone except for the Coastal Reserve to the east, which is in the Environmental Management zone. To the south-west is a 1ha title with a dwelling. To the west are three adjacent titles. The northern most one is 1.1ha and has a dwelling. The middle one (CT 113064/3) is 3.9ha and has dwelling. The balance of the land for these three small titles is pasture. However, CT 113064/3 does have sufficient land area to support up to 3ha of horticultural activity, has some capacity to develop irrigation water resources and is directly adjacent to existing horticultural activity on CT 169832/1 and CT 178762/1.

The southern most one of the adjacent titles on the opposite side of the Channel Highway (CT 169832/1) is 18.6ha, has an existing dwelling and several sheds; one quite large. There is an existing cherry orchard (approx. 3.4ha) on this land and irrigation water resources, chilling and packing facilities. The title extends across the highway to the south (see Figure A1-3). The orchard on the subject land was previously leased to this adjacent neighbouring cherry orchard (on CT 169832/1) owned by KMR Australia Pty Ltd. Approximately 2ha of orchard on the KMR Australia Pty Ltd title has been removed relatively recently; most likely due to disease (pers.comms. 28/03/22 Mr A. Jones). KMR Australia Pty Ltd are one of the largest orchards in the area.

The majority of the adjacent titles to the west and south would be described as 'lifestyle' blocks. Only the KMR Australia Pty Ltd land has commercial scale¹ characteristics. All adjacent titles (except the Coastal Reserve) have existing dwellings located on them. The subject title is relatively constrained with 6 existing dwellings within 200m of the orchard operations (see Figure A1-2).

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As defined by RMCG (January 2022). Enterprise Scale – For primary production in Tasmania. Report prepared to further the concept of the Rural Enterprise Concept for Flinders Local Provisions Schedule. Report prepared for Town Planning Solutions on behalf of Flinders Council.

Under the new State-wide Planning Scheme, the Department of Justice Agricultural Land Mapping Project shows the title as 'potentially constrained 2A' and in the Agriculture 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 Ag Land Mapping Project 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 be unfeasible 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 subject title is part of a cluster of titles with constraints mapping (Constrained 2A, 2B & 3). This cluster connects to a Community purpose zoned title and the Woodbridge 'Rural Living' zone to the North. The Kingborough Draft Local Provision Schedule (LPS) available on line² shows the subject land and surrounding titles as destined for the Agriculture zone.

3 Discussion

The subject title does not have any "prime agricultural" land (Land Capability Classes 1-3 land. The title (3.1ha) is currently almost entirely covered in cherry orchard. The title has off-farm irrigation water resources through a negotiated arrangement with the neighbouring cherry orchard.

The neighbouring cherry orchard has commercial scale characteristics³ and the subject title is separated from the cherry orchard by the Channel Highway which forms a barrier to direct connectivity. This is the only connection with an existing or potential agricultural activity with commercial scale characteristics, in the vicinity of the subject title. The subject title's eastern boundary is shared with the Coastal Reserve and there are small titles with lifestyle scale³ grazing activity on the remaining boundaries.

The size of the title and lack of reliable irrigation water resource limits the subject title as a stand alone viable⁴ agricultural enterprise. Land with these characteristics is best farmed in conjunction with other land to be able to realise the benefits of economies of scale, as occurred prior to sale of the title.

The viability of the cherry orchard is dependent on accessing irrigation water resources, chilling and packing facilities and access to existing established markets through agreements with other growers. With these arrangements in place the Gross Margin calculator⁵ indicates there may be sufficient Gross Income to support a viable operation as defined by RMCG 2022, Enterprise Scale.

The extent of the orchard is approximately 2.67ha (measured on LIST imagery), however, there have been some diseased rows removed and there is also an existing row of poplars. Hence, the density (and therefore anticipated yield) is somewhat reduced from that estimated in the Gross Margin calculator. The development (see Figure A1-4) will result in the loss of approximately 0.5ha of cherry orchard. The proponents intend to offset the removal of the trees with infilling the existing gap rows with cherry trees that have not been replanted to date and replacing the poplar row with a cherry row. The end result will be a net gain in cherry tree numbers.

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 $^{^2 \}quad \text{https://kingborough.maps.arcgis.com/apps/webappviewer/index.html?id=ac8ed3c0cd79418dab6d768c3e6618ef}$

³ As defined by RMCG 2022.

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 \$300,000 Gross Income is questionable.

The NRE cherries – Investment and Gross Margin Analysis spreadsheet available online at https://nre.tas.gov.au/agriculture/investing-in-irrigation/farm-business-planning-tools shows the anticipated Gross Income per hectare would be \$156,250. The calculator allows for 3.6ML/ha of drip irrigation.

The title has no potential to be utilised for a 'viable' agricultural or primary industry enterprise in its own right due to the existing limitations of size, lack of irrigation water and constraints from adjacent non-agricultural use to the north-west, west and south-west. Whilst the productivity of land with these characteristics is normally best realised if farmed in conjunction with other land, in this case the most likely feasible cherry orchard in proximity has discontinued to lease the subject land. The characteristics of surrounding titles indicate that there is little chance of the subject title being farmed in conjunction with any other adjacent land.

The only feasible way for the orchard to maintain productivity is for the owners to negotiate agreements with other growers, as has occurred. The loss of 0.5ha of orchard due to the proposed dwelling is of little consequence when considering the net gain in the number of trees through replanting and the continued productivity of an orchard that is in a relatively precarious long-term commercial viability situation. The loss of this land for agriculture is considered insignificant and a dwelling on the title would not preclude the continued productive capacity of this small scale horticultural operation.

The potential for any future non-agricultural use to constrain primary industry in the vicinity also needs to be considered. The Planning Scheme requires a setback of 50m from the side and rear boundaries. A variation to this standard may be supported by Council if the proposal is attempting to minimise impacts on the agricultural use of the land. The proposed setbacks for the side and rear boundaries to the north-east and south-east, adjacent to the Coastal Reserve are 13m, however, greater setbacks will result in an increased loss of cherry trees as well as placing the dwelling in closer proximity to the adjacent cherry orchard on CT 169832/1. Hence the reduced setbacks are preferred to minimise the loss of cherry trees. Other than CT 169832/1, adjacent titles to the north-west, west and south-west of the subject title are 'lifestyle' lots. Other than (CT 113064/3) these titles have no agricultural/primary industry potential, due to size and presence of existing dwellings. As these titles are effectively converted to a non-agricultural use, there are no agricultural reasons to apply setbacks for a new dwelling from these title boundaries.

Amenity impacts on the dwelling as a result of the cherry orchard on the subject land can be managed as the orchard is small and under the same ownership as the dwelling. Activities can be scheduled to suit the conditions and the amenity requirements.

The setback from the existing cherry orchard on CT 169832/1 is approximately 200m and the setback from areas that could be planted is approximately 165m. The setback from any potential horticultural activities on CT 113064/3 is approximately 85m. Whilst small scale livestock grazing is the most likely land use, on this title, future small scale horticultural activities in conjunction with adjacent viable orchards, needs to be considered when considering land use conflict and appropriate setbacks.

There are a range of activities associated with horticultural operations and grazing. 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 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 (including shooting for game control), irrigation spray drift, odours and dust. The types of activities associated with horticultural operations which may affect residential amenity are generally much more frequent and of greater concern than activities associated with grazing activities. These are generally limited to fertiliser spreading, perhaps weed spraying and fodder conservation, and occasional cultivation and re-sowing of pastures.

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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 \$300,000 Gross Income is questionable.

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 cherry orchard on the subject land in combination with the separation distance provides an effective vegetation buffer to any adjacent agricultural activities, both during and post construction of the dwelling. A 200m separation distance to the cherry orchard on CT 169832/1 and 85m separation distance to any potential future horticultural activity on CT 113064/3 is considered sufficient distance to reduce the risk of proposed dwelling constraining any adjacent existing or potential agricultural/primary industry use. In the long term if the cherry orchard on the subject land fails, there is sufficient separation distance between the proposed dwelling and the boundaries to the north, north-west and west to establish new vegetation buffers on the subject title if required.

Under the Kingborough Draft Local Provision Schedule (LPS) the subject land and surrounding titles are destined for the Agriculture zone. Required setbacks under the Tasmanian Planning Scheme in the Agriculture zone is 200m, unless there is an existing precedence for a reduced setback. The Draft LPS is subject to advertising and public consultation and may be amended as a result. Because of the cluster of 'constrained titles', their land use and their proximity to Woodbridge, there is a possibility that these titles will be zoned 'Rural' in the new Planning Scheme rather than 'Agriculture', if there are representations supporting that and if it is determined by the Planning Commission that the characteristics of the area are more suited to the Rural zone. Required setbacks for dwellings from adjacent Rural zoned titles in the new Planning Scheme are 5m.

4 Conclusions

It is our opinion that the construction of a dwelling and driveway access on the title does not contravene the agricultural requirements of the Planning Scheme (Clauses 26.3.1 (P1) and 26.3.3 (P1)), as specified in the Further Information request from the Kingborough Council dated 01/02/202. We believe that the title is practically incapable of supporting an agricultural enterprise, on its own, and is reliant on negotiated agreements for access to water resources and to achieve economies of scale for chilling and packing facilities and access to markets.

The new owners have secured the necessary agreements and there will be a net gain in the number of cherry trees as a result of infill plantings. Amenity impacts on the dwelling as a result of the cherry orchard on the subject land can be managed as the orchard is small and activities can be scheduled to suit the conditions. Sufficient setbacks and buffers can be achieved between the new dwelling and adjacent existing and potential agricultural use, to minimise the risk of constraining agricultural/primary industry activity in the vicinity.

5 References

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Appendix 1: Maps

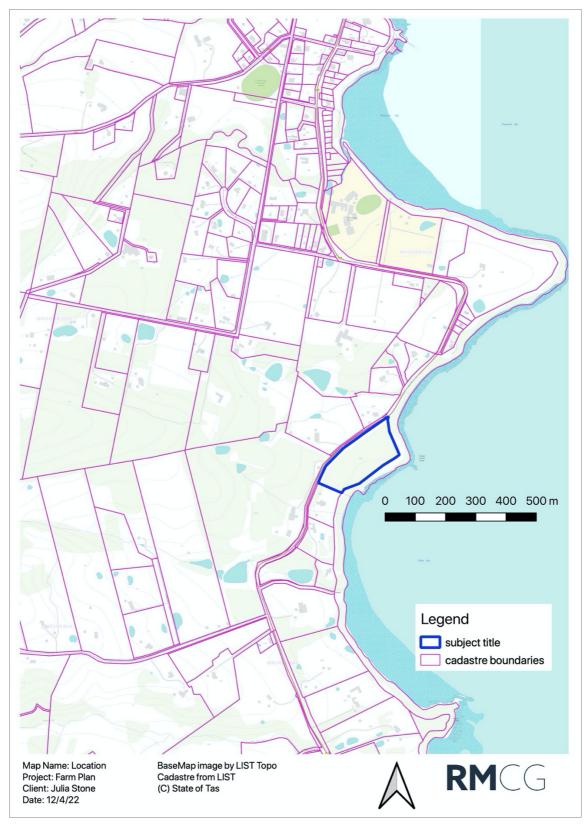


Figure A1-1: Location

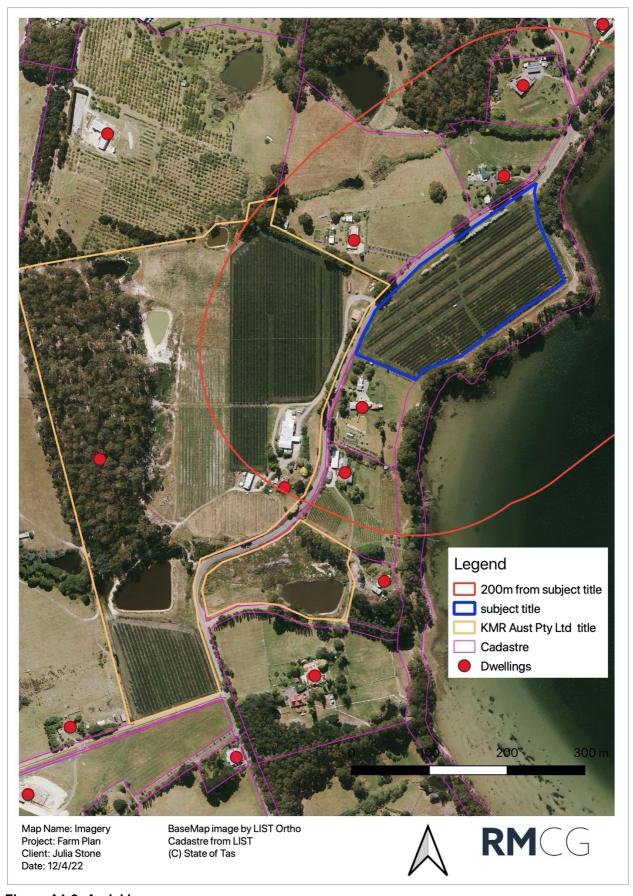


Figure A1-2: Aerial image

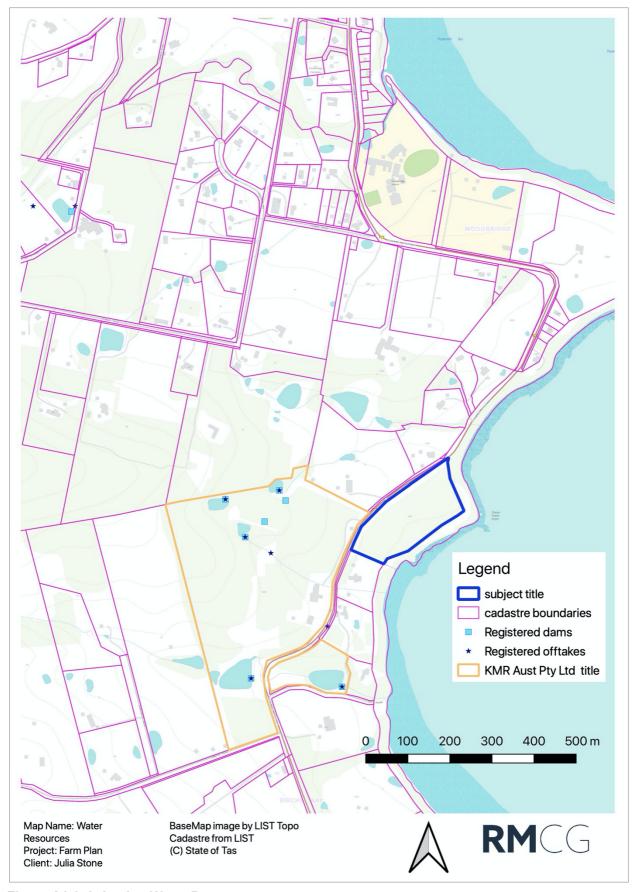


Figure A1-3: Irrigation Water Resources

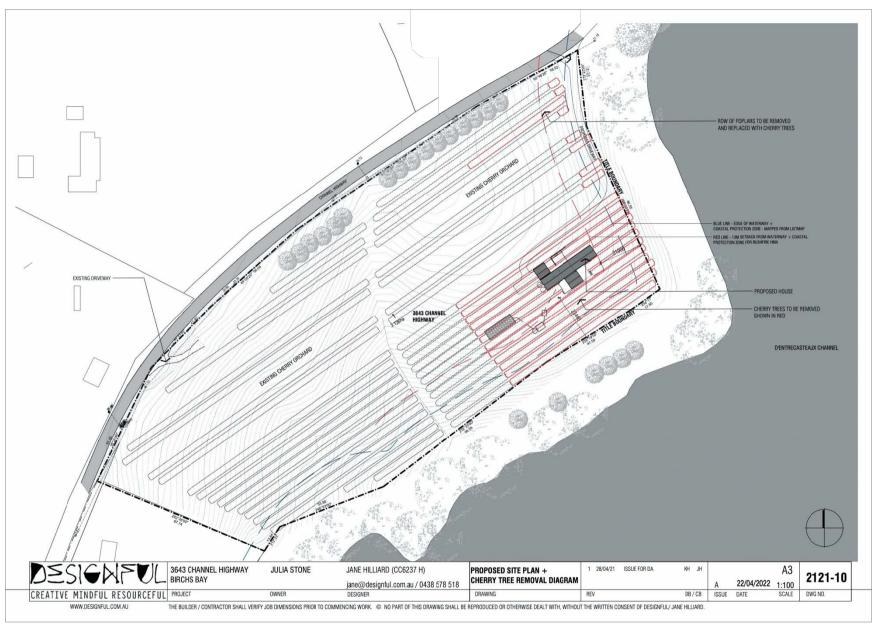


Figure A1-4: Site Plan

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Appendix 2: Land Capability definitions from Grose (1999)

Prime agricultural land as described in the Protection of Agricultural Land Policy 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 I 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 yens 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 Policy 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: Potential conflict issues

Tables A3-1 and A3-2 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 these specific issues associated with these activities Learmonth et. al. (2007) also provides a comprehensive list of potential land use conflict issues (see Figure A3-1). Tables A3-1 and A3-2 provide the rationale behind the recommended minimum buffers contained in Table A4-1 (Appendix 4).

Table A3-1: 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 A3-2: Farming activity – Cherries (after establishment)

MANAGEMENT ACTIVITY	ISSUES LIKELY TO CONSTRAIN THE ACTIVITY	COMMENT
Fungicide spraying	Spray drift Noise	Ground based likely to be very early in the morning
Herbicide spraying	Spray drift Noise	Ground based likely to be very early in the morning
Insecticide spraying	Spray drift Noise	Ground based likely to be very early in the morning
Irrigation	Spray drift Noise	
Frost fans	Noise	
Harvesting Dec - March	By hand or machine Noise	Tractor & traffic
Pruning June – Sept	By hand	Tractor & traffic

Issue	Explanation
Absentee	Neighbours may be relied upon to manage issues such as bush fires, straying stock, trespassers etc.
landholders	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 carcases/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).

Figure A3-1: Typical rural land use conflict issues (Learmonth et al. 2007).

Appendix 4: Characteristics of a Commercial Scale Farm Business Activity

It is very difficult to provide an assessment of the commercial viability of a single farm business activity as generally more than one farm business activity contributes to a farming business. Table A4-1 is designed to describe the general characteristics of a commercial scale farm business activity in Tasmania. Table A4-1 can be used to characterise land and water resources to determine whether they have the capacity to contribute to a commercial scale farm business activity. For example, a farming business with less than 4ha of cherries is likely to need additional farming activities to be viable.

Table A4-1: Resource Requirements for Various Land Uses

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS &	NURSERIES & CUT	FORESTRY
RESOURCE	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET	BERRIES	VINES	FLOWERS	PLANTATIONS
Land Capability	LC generally 3–6.	LC generally 3– 5/6.	LC generally 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 system.	10–15ha min	5–10ha min.	10ha min.	10ha min.	2–4ha.	2–5ha.	2–4ha min.	10–20ha min.
Size for a 'viable' business if conducted as single farm business activity (1)	Generally 3,000–10,000 dse -area depends on rainfally (2)		for at least	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.	ТВС	
Irrigation water	Not essential	Not essential	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 & shearing shed.	Yards, crush, loading ramp.	Dairy shed, yards, crush, loading ramp.	Minimal.	Irrig facilities.	Irrig facilities.	Irrig facilities. Possibly a packing shed unless using a contract packer or growing on contract	Irrig facilities. Packing shed	Irrig facilities. Packing shed	Plastic/glass houses.	Firefighting dams. Access roads

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RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS &	NURSERIES & CUT	FORESTRY
	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET	BERRIES	VINES	FLOWERS	PLANTATIONS
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.	Contract services.
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.	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.

Table notes:

- 1. The Agricultural Land Mapping Project (ALMP) (Dept of Justice, 2017) defined minimum threshold titles sizes that could potentially sustain a standalone agricultural farm business activity. The ALMP have 333ha for a livestock farm business activity, 40ha for dairy, 133ha for cereals and other broadacre crops, 25ha for processed and fresh market vegetable, 10ha for berries, other fruits & vines and nurseries and cut flowers and no specified minimum area for plantation forestry.
- 2. Kynetec (March 2021) Farm Intel Information brochure uses 100ha as the minimum farm area for livestock
- 3. Kynetec (March 2021) Farm Intel Information brochure uses 75ha as the minimum farm area for dairy.

Appendix 5: Separation distances and buffers

Farm business activity scale (RMCG 2022) in combination with Table 5-1 can be used to provide guidance on appropriate separation distances when there are no additional mitigating factors. Appendix 3 provides guidance on constraints and potential conflict issues in relation to the relevant current and potential farming activities in proximity to a sensitive use. The performance criteria 26.3.1 Sensitive Use (including residential use) and 26.3.3 Discretionary Use, under the Kingborough Interim Planning Scheme, requires consideration of additional factors.

Table 5-1: Separation distances

RESOURCE	LIVESTOCK			BROAD ACRE CROPS		VEGETABLES		BERRIES	ORCHARD FRUITS &	NURSERIES & CUT	FORESTRY PLANTATIO
RECOUNCE	SHEEP	CATTLE	DAIRY	CEREALS	OTHERS	PROCESSED	FRESH MARKET	JEMM25	VINES	FLOWERS	NS
Recommended min. buffer for individual dwellings (1)	50m to dryland and 100m to irrigated grazing area (3)	50m to dryland and 100m to irrigated grazing area.(3).	50m to dryland and, 100m to irrigated grazing, 300m to dairy shed and 250m 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 dryland and 100m to irrigated grazing area.(3)	50m to dryland and 100m to irrigated grazing area.(3)	50m to dryland and, 100m to irrigated grazing, 300m to dairy shed and 250m to effluent storage or continuous application areas (2).	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 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.} The State Dairy Effluent Working Group, 1997 uses 50m to grazing area, 250m to dairy shed and 300m to effluent storage or continuous application areas. The State Planning Scheme uses 300m to diary shed and 250m to effluent lagoon

^{3.} Learmonth, Whitehead, Boyd & Fletcher, 2007 uses 50m from grazing areas.

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