

Agricultural Report

for the proposed

Tempus Retirement Village Development

Freycinet Coast, Tasmania

‘Consideration’

of the

State Policy on the Protection of Agricultural Land 2009

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1. Introduction

The following document is due consideration of the ‘Principles’ addressed in the Tasmanian ‘State Policy on the Protection of Agricultural Land 2009’ (DPAC, 2009).

This due consideration of the ‘Principles’ relates to the 17.91 ha of land or ‘Subject Land’ that is being proposed for the ‘Tempus Retirement Village development’. This parcel of land is on the North East area of the Kelvedon Estate agricultural property or ‘Balance Land’ bounded, in part, by the Tasman Highway and the Mt Pleasant road, approximately 3.5 km south of the town of Swansea.

The objective of this report is to justify and provide clarity that the ‘Tempus Retirement Village’ enterprise is a sustainable development of land that is currently zoned as ‘Significant Agricultural’.

2. Summary of Agricultural Report

The following points 1. through to 11. are the ‘Principles’ that are required to be clarified by the State Policy on the Protection of Agricultural land 2009’ (DPAC 2009).

1. *Agricultural land is a valuable resource and its use for the sustainable development of agriculture should not be unreasonably confined or restrained by non-agricultural use or development.*

The land planned for the Tempus Retirement Village is not ‘Prime Agricultural’ land and by contrast can be categorized as marginal agricultural countryside that would have limited uses for farming.

The Tempus 17.91 ha block or ‘subject land’ is currently zoned as ‘Significant Agriculture’ (<https://maps.thelist.tas.gov.au/listmap/app/list/map>). The ‘Significant Agriculture’ terminology has been identified through the implementation process of the Tasmania Planning Scheme as not being ‘fit for purpose’ when describing rural agricultural areas. It has been identified that there is a need for “two different rural zones” correlated to “the characteristics of rural and agricultural land in Tasmania” with a desired outcome of improving the “unnecessary barriers to agricultural industries and diversification.” (Department of Justice, 2017). This review states that the “Significant Agricultural’ zoning was unable to be applied in a manner that reflected the complexities of Tasmania’s agricultural land” (Department of Justice, 2017). The Tasmania Planning Scheme will now use two zones for managing rural and agricultural areas, the Rural Zone and the Agriculture Zone. The Agriculture Zone provides importance to agricultural outcomes. The Rural Zone will identify land that has constrained or no capacity for agriculture. “The Rural Zone provides for all agricultural uses to occur in conjunction with a range of rural businesses and industries” (Department of Justice, 2017).

The rural areas of Tasmania need diversification to complement the established primary industry. A divergence in the rural enterprise outcomes can be demonstrated on the East Coast by the growth

of viticultural industry over the last 20 years on prime sheep agricultural lands. This change in enterprise has provided employment growth and award-winning wines to the region.

The proposed development of the ‘subject land’ provides an alternative opportunity worth considering as a unique diversification of this rural area providing potential growth and development for this East Coast region. Neither the current Interim Planning Scheme or that proposed under the Tasmanian Planning Scheme suitably provides the diversification the proposed Tempus enterprise could offer on the ‘subject land’ that would be characteristically described as marginal agricultural land in a low rainfall area.

The area of land proposed for the Tempus Retirement Village development has severe limitations for agricultural outcomes. Historically this block has not been productively cultivated due to the stony nature of soil profile. There is a section of land near the Tasman Highway that was once worked via farm equipment and drilled with pasture seed. However, for most of the block there is high degree of stone on the soil surface and through the soil profile that makes it impossible to be cultivated. The soil profile can be described to be very hard on the farm cultivation equipment that it could not be economically contemplated. If minimal cultivation was possible it would create a high potential erosion risk. The shallow Iron stone type soil is so prolific with stones that when it was last renovated it was accomplished by clearing the land of weeds with a (bull) dozer. The grass production on the land can be quite productive when rain falls at the right time of the year. However, rainfall on the East Coast has lowered over the last ten years compared to the long-term historic farm records. The capacity of this land is limited by average low rainfall and extended periods of drought. Due to this low rainfall the ‘subject land’ is rotationally grazed at a capacity of 4 DSE (Dry Sheep equivalent) per hectare. (i.e. 18 ha grazed at 4 DSE stocking rates equates to 72 sheep over this land area). (personal comm. Jack Cotton).

The Freycinet - Modelled Land Capability Classes map identifies the 17.91 ha Tempus block in general to consist of land that is classified as Class 5 at the scale of 1:100 000 (Lynch 2002). This modelled land capability assessment methodology is to identify the limitations of the land and subsequently use the land resource “within these limitations to ensure sustainable land use for

future generations” (Noble 1992). Class 5 land has “slight to moderate limitations to pastoral use. This land is unsuitable to cropping, although some areas on easier slopes may be cultivated for pasture renewal. The effects of limitations on the grazing potential may be reduced to applying appropriate soil conservation and land management practices (Nobel 1992).

However, “at the 1:100 000 map scale, the minimum area which can be adequately depicted on the map represents approximately 64 ha on the ground” and at that scale “maps are rarely made up entirely of the land capability class indicated” (Noble 1992). Accordingly, a land capability assessment of the proposed 17.91 ha Tempus Retirement Village development on the Kelvedon Estate property required a field assessment to investigate the ‘subject land’. Hancl 2019 completed a field assessment of the subject land on Thursday 13th June 2019 and documented a ‘Land Capability Assessment’.

The Land Capability assessment identified that the ‘subject land’ is covered with areas of cleared land and areas of light woodlands. The woodland areas consist mainly of Eucalyptus species (i.e. White Gums and Peppermint Gums), Acacia’s (i.e. Black Wattles) and typical agricultural weeds like Gorse and Prickly Box.

The best land capability classification that can be applied to the ‘subject land’ is Class 5 land as described by the Modelled land Capability Classes of Tasmania, Freycinet 1:100,000 map (Lynch 2002). The pastoral suitability is medium, and the land use options are limited.

The main soil type on the Tempus block can be considered a shallow red-brown stony clay-loam soil type (i.e. similar to a Krasnozems type soil, refer Chilvers 1996). Most of the Class 5 land can be characterized to have a sub class rating for the soil of ‘g’. The sub class ‘g’ is defined as ‘Limitations caused by excess amounts of coarse fragments (particles of rock 2-600 mm in size), including gravel, pebbles and stone, which impact on machinery, damage crops or limit growth. Coarse fragments may occur on the soil surface or throughout the profile” (Grose 1999). This stony nature of the soil profile subsequently provides serve limitation to production of any high

value horticultural produces or agricultural forage crops that could be considered on the subject land.

The Tempus block is also defined by areas of Class 6 Land. Class 6 land is “marginally suitable for grazing because of severe limitations. This land has low levels of production, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use” (Noble 1992). This type Class 6 land would be associated with the areas of land defined by establish woodlands and / or where rock outcrops on the soil surface.

Agriculturally the proposed ‘subject land’ can be described as land that is not suitable to cropping and has limitations to pastoral use as defined by the Land Capability Classification system. Land capability should not be confused with land suitability. Land suitability by comparison considers a more detailed collection of resource information. The key aspects that should be considered for land suitability for crop production (e.g. viticulture / olives / walnuts) include the state of that industry, climate, soil type, rainfall / water availability and cultivar selection.

The pasture production and farm productivity from the land in this East Coast region is severely restricted by rain fall outcomes and the area is currently in drought conditions for the last 8 months. For example, Mayfield Agricultural property, south of Kelvedon Estate, 2019 year to date rainfall has been only 134 mm (Personnel Comm. Bruce Dunbabin. 29th August 2019). This low rainfall is not advantageous for winter-spring pasture production and farm stocking level outcomes. Notably the Federal Government climate change modelling for the East Coast correlates to lower rainfall outcomes for this region and average temperatures will increase in all seasons in the future. (<https://www.climatechangeinaustralia.gov.au>).

Fundamentally the suitability of the agricultural land south of Swansea, to typically viticulture and / or other horticultural operation is the security of water supply to that enterprise. This region has historically low rainfall outcomes and the long-term climate change forecast in general identifies lower precipitation predictions for the East Coast of Tasmania. The ‘subject land’ is located in the Swan Irrigation District but the Scheme does not include a pipeline south of Swansea (Tasmania

Irrigation 2017). Irrigation Tasmania has confirmed that there is no plan to extend the Swan Irrigation scheme further south than Mainline 4 (M4) or south of Swansea (Personal communication, Paul Ellery). Notably the Swan Irrigation scheme has only allocated 75% water security outcomes for the 2019 season to farms north of Swansea that utilize this rural resource. The proposed Tempus Retirement Village would not confine or restrain agricultural water security outcomes to the 'balance land' or other irrigated horticultural ventures in the area.

The 'subject land' is located near a 16-ha vineyard that has situated on suitable land. The water security requirements for this vineyard should be examined to identify local area prerequisite to sustain this investment. If this vineyard was to supply grapes to a corporate wine company sourcing grape from the East Coast region, then it would be required to have access to a water supply of 2 ML / ha / year of commissioned wine grapes with a supply buffer for two seasons (personal comm. Bruce Dunbabin). For example, this would correlate to this 16-ha vineyard having access to a minimum of a 64 Meg water security to source a corporate wine contract. The dam that this vineyard sources water from is approximately 100 meg. But this dam has not filled to overflowing since 2016 and water has been sourced from Stoney Creek flows to establish this viticultural venture. The venture delayed planting time frames due to a lack of stored / available water outcomes (personal comm. Jack Cotton).

In summary the 'subject' land is marginal land that has severe limitation for agricultural use. The land in general can be classified as either Class 5, Class 5a or Class 6 land that arguably should not be termed 'Significant Agriculture Zone'. This land cannot be successfully cultivated due to the stony nature of the soil profile and if it was ploughed then there would be a high risk for erosion. This land is constrained in agricultural pastoral outcomes due to the low rainfall of the area and this grazing potential looks highly problematic based on the long-term climate forecast for the East Coast region. The 'subject land' is in the Swan district irrigation zone but this will be of no advantage for agriculture in this area as there is no planned pipeline to the area that could provide water security.

By comparison the 'balance land' of the Kelvedon Estate property has a current sheep stocking rate that consists of about 7000 head, but this is down on total capacity of the property due to lower

rainfall outcomes of more recent years (personal comm. Jack Cotton). Just over half the property or 2829 ha is covered with Eucalyptus woodlands and is not utilized for agriculture grazing outcomes with 1200 ha of this area being locked-up for conservation (via caveat) under the private forest reserve program. A further 1923 ha of the property consists of grazed native pasture woodlands, 511 ha of improved or renovated pastures and 28 ha of land is utilized for forage cropping outcomes like lucerne, oats and rape type crops. Historically this 28 ha has been utilized for crops that include feed barley, poppies, freezer peas, onion seed, ryegrass seed and brassica seed production. The improved pasture would carry approximately 10 DSE / ha (dry-sheep equivalent) and the run country would carry about 4 DSE / ha. The other primary production on the farm includes 9 ha of award-winning wine grape production. (i.e. predominately Pinot noir and Chardonnay cultivars) (personal comm. Jack Cotton).

The ‘balance land’ of the Kelvedon Estate agricultural business would have no significant loss of grazing land, grazing potential or financial income if the ‘subject land’ was to be allocated to another planning outcome or venture that provided diversification in this rural area.

2. *Use or development of prime agricultural land should not result in unnecessary conversion to non-agricultural use or agricultural use not dependent on the soil as the growth medium.*

‘Prime agricultural land’ is defined as land that is classified as either Class 1, Class 2 or Class 3 land (Grose, 1999). The 17.91 ha area of land proposed for Tempus Retirement Village development has been classified as Class 5, Class 5g and Class 6 land (Hanc1, 2019). Subsequently this ‘Principle’ is not applicable.

3. *Use or development, other than residential, of prime agricultural land that is directly associated with, and a subservient part of, an agricultural use of that land is consistent with this Policy.*

‘Prime agricultural land’ is defined as land that is classified as either Class 1, Class 2 or Class 3 land (Grose, 1999). The 17.91 ha area of land proposed for Tempus Retirement Village

development has been classified as Class 5, Class 5g and Class 6 land (Hanel, 2019). Subsequently this ‘Principle’ is not applicable.

4. *The development of utilities, extractive industries and controlled environment agriculture on prime agricultural land may be allowed, having regard to criteria, including the following:*
 - a) *minimising the amount of land alienated;*
 - b) *minimising negative impacts on the surrounding environment; and*
 - c) *ensuring the particular location is reasonably required for operational efficiency.*

‘Prime agricultural land’ is defined as land that is classified as either Class 1, Class 2 or Class 3 land (Grose, 1999). The 17.91 ha area of land proposed for Tempus Retirement Village development has been classified as Class 5, Class 5g and Class 6 land (Hanel, 2019). Subsequently this ‘Principle’ is not applicable.

5. *Residential use of agricultural land is consistent with this Policy where it is required as part of an agricultural use or where it does not unreasonably convert agricultural land and does not confine or restrain agricultural use on or in the vicinity of that land.*

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improved pasture would carry approximately 10 DSE / ha (dry-sheep equivalent) and the run country would carry about 4 DSE / ha. The other primary production on the farm includes 9 ha of award-winning wine grape production. (i.e. predominately Pinot noir and Chardonnay cultivars) (personal comm. Jack Cotton).

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The pasture production and farm productivity from the land in this East Coast region is severely restricted by rain fall outcomes and the area is currently in drought conditions for the last 8 months. For example, Mayfield Agricultural property, south of Kelvedon Estate, 2019 year to date rainfall has been only 134 mm (Personnel Comm. Bruce Dunbabin. 29th August 2019). This low rainfall is not advantageous for winter-spring pasture production and farm stocking level outcomes.

Notably the Federal Government climate change modelling for the East Coast correlates to lower rainfall outcomes for this region and average temperatures will increase in all seasons in the future. (<https://www.climatechangeinaustralia.gov.au>).

Fundamentally the suitability of the agricultural land south of Swansea, to typically viticulture and / or other horticultural operation is the security of water supply to that enterprise. This region has a historic low rainfall and the long-term climate change forecast in general identifies lower precipitation outcomes for the East Coast of Tasmania. The ‘subject land’ is located in the Swan Irrigation District but the Scheme but does not include a pipeline south of Swansea (Tasmania Irrigation 2017). Irrigation Tasmania has confirmed that there is no plan to extend the Swan Irrigation scheme further south than Mainline 4 (M4) or south of Swansea (Personal communication, Paul Ellery). Notably the Swan Irrigation scheme has only allocated 75% water security outcomes for the 2019 season to farmer north of Swansea that utilize this rural resource. The proposed Tempus Retirement Village would not confine or restrain agricultural water security outcomes to the ‘balance land’ or other irrigated horticultural ventures in the area.

In summary the ‘subject’ land is marginal land that has severe limitation for agricultural use. The land in general can be classified as either Class 5, Class 5a or Class 6 land that arguably should not be termed ‘Significant Agriculture Zone’ or ‘Rural Resource Zone’. This land cannot be successfully cultivated due to the stony nature of the soil profile and if it was ploughed then there would be a high risk for erosion. This land is constrained in agricultural pastoral outcomes due to the low rainfall of the area and this grazing potential looks grim based on the long-term climate forecast for the East Coast region. The ‘subject land’ is in the Swan district irrigation zone but this will be of no advantage for agriculture as there is no planned pipeline to the area that could provide water security.

But new rural developments, like the Tempus Retirement proposal, should be considered as an industry that would provide diversification of rural region. The development recognizes the limitation of the land and would be “using it within these limitations to ensure sustainable land use for future generations” (Noble 1999)

The diversification of the rural region that the Tempus Retirement development offers would not confine or restrain agricultural use on or in the vicinity of that land because it would be a good use of this marginal land in a low rainfall area.

Notably the presence of non-rural land use and agriculture and / or horticulture land use outcomes in on location may create circumstances of tension due to the potential conflict of interests. For example agricultural outcomes may conflict with residential purposes due to noise, odours, farm chemicals etc or residential purposes may adversely affect of the operations of agricultural enterprises.

Learmonth (2007) identifies that “various mechanisms and strategies” can be applied “to manage conflict associated with change in land use and between neighbouring land uses” and describes “a set of principles for avoiding and managing rural land use conflict issues and for creating a healthy, productive and proactive rural environment”.

The following mitigation measures have been explored in regards to the potential development of the Tempus Retirement Village on the ‘subject land’:

- Buffers / setback are proposed between sensitive development and the boundary of the agricultural zone will recognize that prior land use practices have precedence in rural areas.
- Codes of practice, best practice guides and education at all levels should govern best practice management and environmental care outcomes which subsequently will reduce any potential risk of conflict. For example:
 - Crop spraying is controlled by regulations and legislation (i.e. Pesticide Label). Farm workers should be ChemCert Accredited (<https://www.chemcert.com.au>) to operate pesticide spray equipment. This certification provides a knowledge base for the decision making process for best practice outcomes for all concerned groups.
 - Agricultural Adviser should be AgSafe accredited (<https://www.agsafe.org.au>) to advise on agricultural / horticultural pesticide farming inputs. This certification provides a knowledge base for the decision making process for best practice outcomes for all concerned groups.
 - Noise outcomes from agriculture:

- e.g. bird scarers used in viticulture can be avoided with alternative technologies or netting.
 - e.g. mechanical harvesting used in viticulture can be managed and generally are low noise outputs. But premium quality hand-picked grapes should be an objective of this viticultural regions.
- Firearms (shooting) are controlled by legislation (i.e. restricted within proximity of boundaries).
- Good communications, respect and a duty of care between neighbours and key vested groups helps establish good harmonious relationships and enables any negotiation required to resolve any potential conflict. Notably one of the proponents is the owner of Kelvedon Estate or the 'balance land' which provides an ability to avoid or negotiate any potential of conflict.
- The lack of available irrigation water in this area of the Swan District scheme limits all intensive agricultural or horticultural enterprises in the location.
- Water Security for intensive agriculture in this localised region is a risk based on current low rainfall and drought conditions and forecasted climate outcomes. The 'subject land' proposal would not confine or restrain agricultural water security outcomes to the 'balance land' or other irrigated horticultural ventures in the area.
- The balance land has higher quality land close to the Kelvedon Homestead. This land is both dry land and irrigated. Pivot irrigation is planned for parts of this agricultural land (Personal comm. Jack Cotton)

The underlying concept of this retirement village development is that this type diversification it is understood to be one that is founded in a rural context and will subsequently attract residents that are aware and understand the character and amenity of this rural environment.

Based on the facts presented I would consider that this proposal is not an unreasonable conversion of the 'subject land' to another planning or zoning outcome that provided diversification in the rural area.

6. *Proposals of significant benefit to a region that may cause prime agricultural land to be converted to non-agricultural use or agricultural use not dependent on the soil as a growth medium, and which are not covered by Principles 3, 4 or 5, will need to demonstrate significant benefits to the region based on an assessment of the social, environmental and economic costs and benefits.*

‘Prime agricultural land’ is defined as land that is classified as either Class 1, Class 2 or Class 3 land (Grose, 1999). The 17.91 ha area of land proposed for Tempus Retirement Village development has been classified as Class 5, Class 5g and Class 6 land (Hancl, 2019). Subsequently this ‘Principle’ is not applicable to the objectives of the State Policy on the Protection of Agricultural land 2019.

7. *The protection of non-prime agricultural land from conversion to non-agricultural use will be determined through consideration of the local and regional significance of that land for agricultural use.*

The 17.91 ha area of land proposed for Tempus Retirement Village development has been classified as Class 5, Class 5g and Class 6 land (Hancl, 2019). The ‘subject land’ has been described as non-prime agricultural land. This land, at best outcomes, is grazed at 4 DSE (dry sheep equivalent) per hectare which correlates to 72 sheep. By comparison improved pasture on the Kelvedon Estate property would carry approximately 10 DSE. Subsequently, by default, the ‘subject land’ can be described as not significant agricultural land on a local or regional level.

The Tempus 17.91 ha block or ‘subject land’ is currently zoned as ‘Significant Agriculture’ (<https://maps.thelist.tas.gov.au/listmap/app/list/map>). The ‘Significant Agriculture’ terminology has been identified through the implementation process of the Tasmania Planning Scheme as not being ‘fit for purpose’ when describing rural agricultural areas. It has been identified that there is a need for “two different rural zones” correlated to “the characteristics of rural and agricultural land in Tasmania” with a desired outcome of improving the “unnecessary barriers to agricultural industries and diversification.” (Department of Justice, 2017). This review states that the “Significant Agricultural’ zoning was unable to be applied in a manner that reflected the complexities of Tasmania’s agricultural land” (Department of Justice, 2017). The Tasmania Planning Scheme will now use two zones for managing rural and agricultural areas, the Rural Zone

and the Agriculture Zone. The Agricultural Zone provides importance to agricultural outcomes. The Rural Zone will identify land that has constrained or no capacity for agriculture. “The Rural Zone provides for all agricultural uses to occur in conjunction with a range of rural businesses and industries” (Department of Justice, 2017).

The proposed development of the ‘subject land’ provides an alternative opportunity worth considering as a unique diversification of this rural area providing potential growth and development for this East Coast region. Neither the current Interim Planning Scheme or that proposed under the Tasmanian Planning Scheme suitably provides the diversification the proposed Tempus enterprise could offer on the ‘subject land’ that would be characteristically described as marginal agricultural land in a low rainfall area.

8. *Provision must be made for the appropriate protection of agricultural land within irrigation districts proclaimed under Part 9 of the Water Management Act 1999 and may be made for the protection of other areas that may benefit from broad-scale irrigation development.*

The pasture production and farm productivity from the land in this East Coast region is severely restricted by rain fall outcomes and the area is currently in drought conditions for the last 8 months. For example, Mayfield Agricultural property, south of Kelvedon Estate, 2019 year to date rainfall has been only 134 mm (Personnel Comm. Bruce Dunbabin. 29th August 2019). This low rainfall is not advantageous for winter-spring pasture production and farm stocking level outcomes. Notably the Federal Government climate change modelling for the East Coast correlates to lower rainfall outcomes for this region and average temperatures will increase in all seasons in the future. (<https://www.climatechangeinaustralia.gov.au>).

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District but the Scheme but does not include a pipeline south of Swansea (Tasmania Irrigation 2017). Irrigation Tasmania has confirmed that there is no plan to extend the Swan Irrigation scheme further south than Mainline 4 (M4) or south of Swansea (Personal communication, Paul Ellery). Notably the Swan Irrigation scheme has only allocated 75% water security outcomes for the 2019 season to farmer north of Swansea that utilize this rural resource. The proposed Tempus Retirement Village would not confine or restrain agricultural water security outcomes to the 'balance land' or other irrigated horticultural ventures in the area.

In summary the 'subject' land is marginal land that has severe limitation for agricultural use. The land in general can be classified as either Class 5, Class 5a or Class 6 land that arguably should not be termed 'Significant Agriculture Zone' or 'Rural Resource Zone'. This land cannot be successfully cultivated due to the stony nature of the soil profile and if it was ploughed then there would be a high risk for erosion. This land is constrained in agricultural pastoral outcomes due to the low rainfall of the area and this grazing potential looks grim based on the long-term climate forecast for the East Coast region. The 'subject land' is in the Swan district irrigation zone but this will be of no advantage for agriculture as there is no planned pipeline to the area that could provide water security.

9. *Planning schemes must not prohibit or require a discretionary permit for an agricultural use on land zoned for rural purposes where that use depends on the soil as the growth medium, except as prescribed in Principles 10 and 11.*

The 'subject' land is marginal land that has severe limitation for agricultural use. The land in general can be classified as either Class 5, Class 5a or Class 6 land that arguably should not be termed 'Significant Agriculture Zone'. This land cannot be successfully cultivated due to the stony nature of the soil profile and if it was ploughed then there would be a high risk for erosion. This land is constrained in agricultural pastoral outcomes due to the low rainfall of the area and this grazing potential looks highly problematic based on the long-term climate forecast for the East Coast region.

The 'subject land' can be described as not significant agricultural land as it has either:

- a. Class 5 rating or “slight to moderate limitations to pastoral use. This land is unsuitable to cropping, although some areas on easier slopes may be cultivated for pasture renewal. The effects of limitations on the grazing potential may be reduced to applying appropriate soil conservation and land management practices (Nobel 1992).
- b. Class 5g rating or the majority of the Class 5 land can be characterized to have a dominant sub class rating for the soil of ‘g’. The sub class ‘g’ is defined as ‘Limitations caused by excess amounts of coarse fragments (particles of rock 2-600 mm in size), including gravel, pebbles and stone, which impact on machinery, damage crops or limit growth. Coarse fragments may occur on the soil surface or throughout the profile” (Grose 1999).
- c. Class 6 rating or “marginally suitable for grazing because of severe limitations. This land has low levels of production, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use” (Noble 1992).

However, minor hobby farming type agricultural or horticultural outcomes on the ‘subject land’ could be sustainable in localized area where light land cultivation and soil amendment could be utilised to ascertain good agronomic cropping outcomes. These farming outcomes would be constrained by irrigation or rainfall potential in the region. Without a reliable rainfall and / or irrigation potential any planned agricultural or horticultural ventures would not be on a commercial basis.

Agriculturally the Kelvedon Estate property is located in a low rainfall area. The property reportedly once was considered to have an average rainfall of approximately 640 mm, but this statistic has lowered over the more recent years (personal comm. Jack Cotton). The BOM (Bureau of Metrology) data suggest a long-term average rainfall (Swansea Post Office, 1884 - 2008) of 593mm (i.e. approx. 24 inches) for the area but this would be 10 km away from this property homestead (i.e. data collection point).

The pasture production and farm productivity from the land in this East Coast region is severely restricted by rain fall outcomes and the area is currently in drought conditions for the last 8 months. For example, Mayfield Agricultural property, south of Kelvedon Estate, 2019 year to date rainfall

has been only 134 mm (Personnel Comm. Bruce Dunbabin. 29th August 2019). This low rainfall is not advantageous for winter-spring pasture production and farm stocking level outcomes. Notably the Federal Government climate change modelling for the East Coast correlates to lower rainfall outcomes for this region and average temperatures will increase in all seasons in the future. (<https://www.climatechangeinaustralia.gov.au>).

10. *New plantation forestry must not be established on prime agricultural land unless a planning scheme reviewed in accordance with this Policy provides otherwise. Planning scheme provisions must take into account the operational practicalities of plantation management, the size of the areas of prime agricultural land, their location in relation to areas of non-prime agricultural land and existing plantation forestry, and any comprehensive management plans for the land.*

‘Prime agricultural land’ is defined as land that is classified as either Class 1, Class 2 or Class 3 land (Grose, 1999). The 17.91 ha area of land proposed for Tempus Retirement Village development has been classified as Class 5, Class 5g and Class 6 land (Hancl, 2019). There is no proposed plantation forestry development for the Tempus land area and subsequently this ‘Principle’ is not applicable

11. *Planning schemes may require a discretionary permit for plantation forestry where it is necessary to protect, maintain and develop existing agricultural uses that are the recognised fundamental and critical components of the economy of the entire municipal area, and are essential to maintaining the sustainability of that economy.*

There is no proposed plantation forestry development for the Tempus land area and subsequently this ‘Principle’ is not applicable.

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