

# Application Referral Environmental Development

## Planner - Response

<b>From:</b>	Rowan Moore  Environmental Development Planner  5 November 2018
<b>Recommendation:</b>	Proposal is acceptable subject to conditions.
<b>Date Completed:</b>	
<b>Address:</b>	607 - 627 NELSON ROAD, MOUNT NELSON ADJACENT ROAD RESERVE
<b>Proposal:</b>	Subdivision (9 Additional Lots, Road Lot, Public Open Space Lot and Balance)
<b>Application No:</b>	PLN-14-01177-01
<b>Assessment Officer:</b>	Ben Ikin,

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### Referral Officer comments:

#### Assessment:

##### Executive Summary

The proposal seeks the exercise of discretion with regard to Schedule I Clearing of Land, clause D.6.1 (watercourse setback) and Schedule Q Storm Surge and Flood Prone Land.

The proposed subdivision would lead to the loss of up to 1.5ha of degraded '*Eucalyptus pulchella* forest and woodland' (DPU), which is relatively common and well-reserved, and up to 0.14ha of '*Eucalyptus ovata* forest and woodland' (DOV) which is threatened and under-reserved. The proposal would also lead to the loss of a number of blue and black gums which are significant as foraging habitat for the threatened swift parrot.

However, it is proposed to place 1.95ha of the vegetated land in the best condition into a public open space lot that would be transferred to Council, including 1.3ha of the threatened DOV community. This land would also contain the headwaters of Lambert Rivulet and provide connectivity to Council's existing reserve network. It will also be possible to retain a large number of the swift parrot habitat trees during the subdivision and future lot development. If the recommended permit conditions are applied to any permit granted, the proposal would also lead to improvement in the condition of the DOV vegetation within the POS lot through management of existing weeds. The loss of the small area of DOV and some of the DPU community will also provide a greater level of bushfire safety for existing dwellings fronting Nelson Road that currently have inadequate fuel-reduced buffer zones.

On balance, I recommend that discretion is exercised with regard to Schedule I when taking into consideration the assessment criteria of clause I.4.

In my opinion, the proposal can also satisfy clause D.6.2 and the performance criteria of Schedule Q, subject the conditions recommended and those recommended by Council's Environmental Engineering Unit.

##### Proposal

Approval is sought to subdivide a 9.3ha lot at 607-627 Nelson Road, Mt Nelson. The proposed subdivision would result in:

- 9 vacant residential lots ranging in size from 1017m<sup>2</sup> to 2065m<sup>2</sup>;
- a 1746m<sup>2</sup> public road lot;
- a 1.95ha public open space lot along Lambert Rivulet; and
- a balance lot of 5.53ha upon which a dwelling and visitor accommodation units have been approved are in the process of being constructed.

Two stormwater mains are proposed discharging to the proposed public open space (POS) lot. A sewer main is also proposed that would cross the POS lot and connect with existing main on the proposed balance lot.

A number of trees and other vegetation on the site would need to be removed to either facilitate the subdivision works or are likely to be removed if the subdivision is approved and the lots are developed.

Imagery of the site is shown in Figure 1 and Figure 2 below.

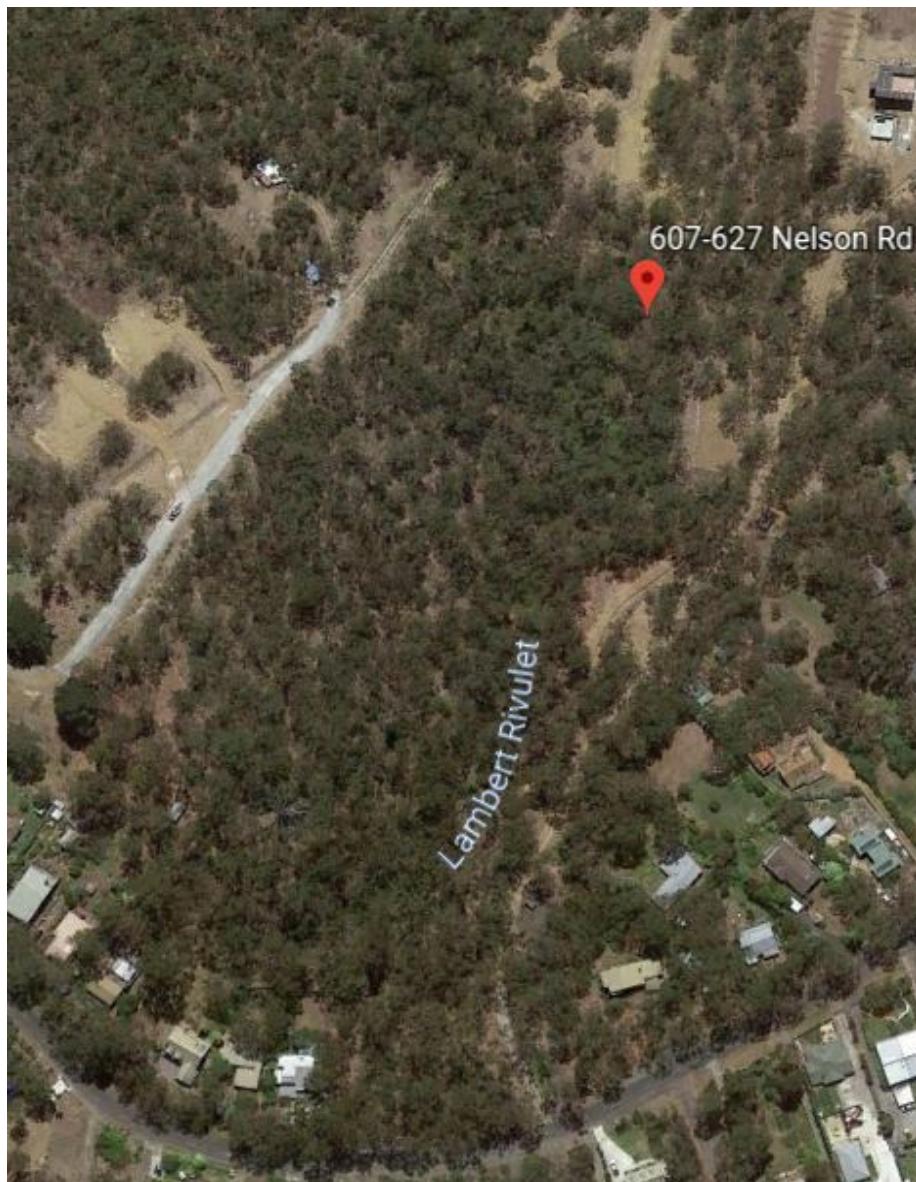


Figure 1: Recent Google Earth image



Figure 2: 2016 aerial photo

#### Site Description

The land (excluding the proposed balance) has a northerly easterly aspect and moderate slope. It supports degraded native *Eucalyptus* forest. Two small watercourses converge into one on the lot being the headwaters of Lambert Rivulet. The watercourse near the southern boundary of the lot begins as little more than a damp drainage line and gradually becomes more defined with a clear channel moving downstream. The mapped geology is Jurassic dolerite.

Portions of the balance lot and a small portion of the proposed POS lot have recently been subject to vegetation clearing, including unapproved clearing that is currently subject to compliance and enforcement action.

The site is located completely within the Residential 2 Zone under the *City of Hobart Planning Scheme 1982*.

#### Background

The proposal has been through several iterations since being lodged in 2014. The original proposal was for 12 residential lots with lot accesses from both Hargrave Place and Nelson Road. A revised proposal was then received in 2015 for 13 residential lots and a large public

open space (POS) lot along Lambert Rivulet. A slightly revised proposal was received in 2017.

The 2017 proposal was assessed and I recommended refusal of that application because in my opinion the application failed to present an adequate case for the exercise of discretion under *Schedule 1 Clearing of Land* with regard to the clearing of threatened *Eucalyptus ovata* (DOV) vegetation and swift parrot habitat (blue gums and black gums). In particular, the proposal lacked detail about the amount of threatened vegetation and habitat trees that would be lost and did not demonstrate that the proposal adequately minimised impacts upon these significant biodiversity values.

After being advised of this recommendation, the applicant revised the application by providing additional ecological information and revised the proposal to include a larger POS lot to capture a much greater proportion of the DOV vegetation and black gum and blue gum trees. However, this proposal included two residential lots fronting Nelson Road that were vegetated entirely with DOV vegetation and a significant number of habitat trees. Around that time Council also became aware of the unapproved vegetation clearing on the site.

The applicant was advised that the revised proposal was still unlikely to be recommended for approval so the application was amended again to remove the two proposed lots fronting Nelson Road. This revised proposal is essentially the current proposal being assessed.

#### State Policy on Water Quality Management

Clause A.2 of the Planning Scheme states the following:

*An application for a permit for the use or development of land shall be accompanied by sufficient information to demonstrate that it will not result in the transport of sediments into surface water such that environmental harm might be caused either during the carrying out of works, or the subsequent use of the land.*

*Council shall consider the information supplied with the application and determine whether,*

- a) the capability of the land is sufficient to support the use or development without giving rise to sediment transport and*
- b) if there is a risk of sediment transport into surface waters, the measures proposed to reduce such risk are adequate*

*Council may impose conditions on any permit to minimise the potential for erosion or water quality degradation.*

As new stormwater infrastructure would be discharging to Lambert Rivulet, there is a risk of sediment transport that may have an impact upon natural values. The proposed outfalls are also located a significant distance from the drainage line, so there may be a risk of erosion or impact to vegetation in the area. There is also a risk that future clearing on the lots to establish bushfire hazard management areas could lead to reduced runoff quality that may degrade the water quality in the Lambert Rivulet headwaters.

In my opinion the risk of sediment transfer that may cause environmental harm and water quality degradation would be low and acceptable subject to:

- implementation of a Council-approved construction management plan that gives particular attention to works in the vicinity of Lambert Rivulet;
- extending the stormwater lines closer to the creek to reduce the risk of new erosion channels being formed;
- appropriate erosion control measures at the outfalls;
- some type of stormwater treatment system (e.g. vegetated swale) to reduce sediment

- loads being discharged to Lambert Rivulet; and
- control of future development on the proposed lots in the vicinity of Lambert Rivulet to minimise erosion and sedimentation risks.

Council's Environmental Engineering Unit have recommended conditions regarding erosion control measures, extending the mains closer to the drainage line and stormwater treatment (in the form of a vegetated swale or bio-filtration system or similar). A condition is also recommended for any permit granted requiring the implementation of a Council-approved construction management plan.

### Principle 17

Principle 17 of the Planning Scheme states the following.

*Requirements regarding any matter affecting probable effects upon energy consumption, microclimate, or the prevention of environmental pollution by waste matter or noise, may be imposed as conditions for approval of any new or changed use or development of land and buildings.*

Principle 17 provides an additional head-of-power to require the conditions recommended above.

### Principle 22

Principle 22 of the Planning Scheme states the following.

*Development shall be assessed as to whether any part of the site is subject to the risk of landslip, soil instability, soil erosion, excessive slope, ponding or flooding, bushfire hazard, soil contamination or environmental or safety hazard or constraints. Conditions on a permit may impose requirements regarding measures to be taken to ensure the risk of any hazard or constraint is reduced to an acceptable level.*

#### *Landslip and erosion*

None of the land has been identified as being particularly susceptible to landsliding in DPAC's *Landslide Hazard Map* or MRT's *Tasmanian Landslide Hazard Series* mapping. Soils derived from Jurassic dolerite can suffer from erosion, but are rarely dispersive (erosion prone).

#### *Ponding/flooding*

There is some risk of flooding of the lower portion of proposed lot 4, however the building area specified in the bushfire hazard management plan is not flood-prone. Flooding issues are also addressed under Schedule Q of the Scheme (addressed later in this assessment).

#### *Bushfire*

The land is bushfire-prone and represents a significant risk for any future occupants of the land. A bushfire report and bushfire hazard management plan (BHMP) were submitted with the application. The submitted bushfire report and BHMP were prepared in accordance with the current version of the Bushfire-Prone Areas Code introduced under Planning Directive 5.1. The BHMP is unusual in that it is intended only to demonstrate that future development of the proposed residential lots can meet the bushfire-prone area requirements of the Building Regulations, and is not intended to be 'locked in' as part of the subdivision approval. The bushfire report also certifies that the proposed public road, private accesses and fire hydrants will meet the requirements of the Bushfire-Prone Areas Code (which are also reflected in the

Building Regulations).

The submitted BHMP shows a potential hazard management area (HMA) ranging in width from 23-34m on the proposed residential lots adjacent the boundary with the proposed public open space lot (refer to Figure 3 below). Virtually all of the remainder of the residential lots are shown as potential building areas. While the BHMP demonstrates that the land proposed for the residential lots has sufficient area and dimensions to provide adequate HMAs for the proposed new residential lots, it does not demonstrate that each proposed individual lot would be of sufficient size and dimensions to have self-contained hazard management areas to meet the deemed-to-comply standards of the *National Construction Code*.

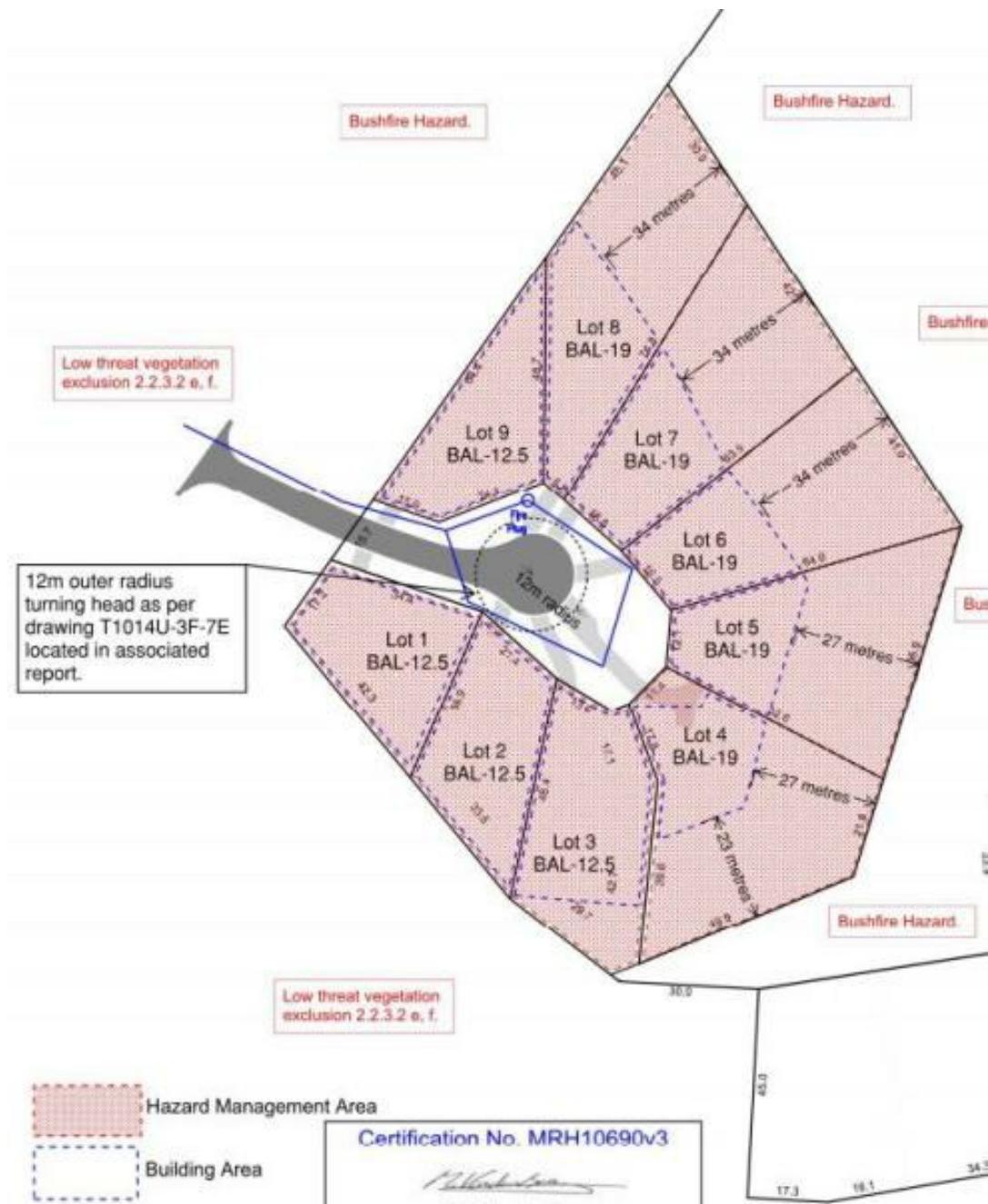


Figure 3: Bushfire Hazard Management Plan (plan)

This would mean that the some of the first lots development in the subdivision would most likely require HMAs on adjoining lots. As there is no guarantee that adjoining owners would consent to the establishment of HMAs on their land for the benefit of adjoining owners, there is some risk that if the lots were approved they could not be developed unless landowners have the legal right to establish and maintain HMAs on adjacent properties.

The application proposes to address this issue with a Part 5 Agreement that allows management of vegetation on lots in other ownership until all the residential lots are developed. While this could be sufficient to ensure each future dwelling has an adequate bushfire HMA, there is no guarantee that every lot, when developed, would be sufficiently managed to ensure that dwellings on adjacent lots do not require formal HMAs beyond their own lot boundaries. This could be because vegetation on an adjoining lot is not being managed sufficiently in a minimal fuel condition as required by their own bushfire plan, or because there is not complete overlap between the HMAs for dwellings on adjoining lots.

I would therefore recommend that a Part 5 Agreement be required that permits a landowner to establish and maintain a bushfire HMA on an adjoining lot, in accordance with a certified BHMP based on BAL-19 construction or higher and approved as part of a Building Permit, at any time that the vegetation on an adjacent lot within their HMA is not in a minimal fuel condition.

#### Schedule D Siting and Landscaping

Clause D.6.1 of the Planning Scheme states the following:

*D.6.1 Development shall be required to be set back as follows:*

- (a) a minimum of 10 metres from the top of the bank of any open watercourse or drainage line.*
- (b) a minimum of 3 metres from the centre of any piped watercourse.*

The application does not comply with clause D.6.1 as development is proposed within 10m of Lambert Rivulet (the section in the southern portion of the land that is best described as a drainage line). This is primarily the proposed installation of hydraulic services including a stormwater main and a sewer main. Future bushfire HMAs are also likely to be located within the setback area.

Clause D.6.2 of the Planning Scheme states the following:

*D.6.2 Council may exercise its discretion to refuse or permit any development which departs from the setbacks specified in D.6.1. Council will only approve a reduction in the specified setback where it can be demonstrated that:*

- a) there will be minimum adverse impact upon the environment,*
- b) no compromising of recreational opportunities,*
- c) there will be no increased risk of any hazard such as flooding, erosion or land instability level, and*
- d) there will be no constraint on access to a Council or other utility service.*

The drainage line through proposed lots 4 and the southern portion of the proposed public open space lot provides minimal habitat values given its ephemeral nature and lack of defined watercourse features such as bed and banks. Impacts upon natural values as a result of these works can be minimised through:

- Implementation of a construction management plan including a soil and water management plan. The key issues that need to be addressed are minimising the area of disturbance, installing sediment and erosion control measures and revegetation of disturbed areas.
- Provision of a stormwater quality treatment system below the proposed outfalls.
- Extension of the proposed stormwater mains closer to the drainage line.
- Provision of scour protection at the proposed outfalls.

Conditions to this effect are recommended below or have been recommended by Council's Environmental Engineering Unit.

Recreational opportunities are unlikely to be affected by the proposed works within the waterway setback area, particularly if stormwater outfalls are moved closer to the creek to avoid the creation of nuisance stormwater areas.

#### Schedule I Clearing of Land

Clause I.2 states the following:

*The Council has a discretion to refuse or permit the removal or destruction of vegetation and associated disturbance of soil in any zone where it involves:-*

- (a) *an area of land greater than 500m<sup>2</sup> on any one lot within 2 consecutive years...*
- (c) *any Significant Tree or vegetation community of conservation significance listed in Appendix 1 to this Schedule.*

More than 500m<sup>2</sup> of vegetation is proposed to be cleared and this includes a vegetation community listed in Appendix 1 (*Eucalyptus ovata* dry forest/woodland). Vegetation would be cleared to:

- construct the road and private accesses to the proposed lots;
- construct a road batter and trafficable verge; and
- install the new sewer, water and stormwater infrastructure.

It is also proposed to clear the indicative building areas identified in the BHMP.

I estimate the area of clearing required for the road and driveways to be in the order of 1500m<sup>2</sup> and 1000m<sup>2</sup> for the hydraulic services. The indicative building areas have an area of approximately 7500m<sup>2</sup> and the indicative bushfire HMAs have an area of approximately 5600m<sup>2</sup>. The total maximum area of clearing if the subdivision were approved could therefore be up to 1.5ha.

While it is likely that bushfire HMAs would necessitate clearing most of the vegetation from the indicative building areas, some vegetation can be retained within HMAs, particularly individual trees. Future dwelling HMAs are likely to require some clearing within the indicative HMA areas (i.e. the remainder of the lots outside the building areas), however it is likely that some of the vegetation in this area will be outside the required HMAs due to houses being set back closer to the proposed road and could therefore be retained. The ultimate area required to be cleared if the subdivision proceeds is therefore likely to be closer to 1ha.

Clause I.4 states the following:

*Council, in considering applications for the destruction or removal of soil or vegetation not exempt under Clause I.3 above, shall take into account:-*

- (a) *the nature and extent of the vegetation to be destroyed or removed;*
- (b) *the proposed means of destruction or removal of vegetation;*
- (c) *possible soil erosion, land instability or drainage channels and the proposed measures to mitigate adverse effects;*
- (d) *the protection of watercourses and water quality including the impact of land clearing on critical riparian areas for protecting water catchments, watershed recharge areas, springs, wetlands, flood plains, and estuaries;*
- (e) *the protection of the amenity value of the vegetation and the general area and its cultural landscape and heritage significance;*
- (f) *the protection of biodiversity, including species, genetic and ecosystem diversity, rare, vulnerable or endangered species, habitat and wildlife corridors; and*
- (g) *any hazards the vegetation poses to health, welfare and safety of persons and property, including the risks from fire.*

Information about the natural values present on the land and the impact of the proposal is

provided in several documents submitted with the application:

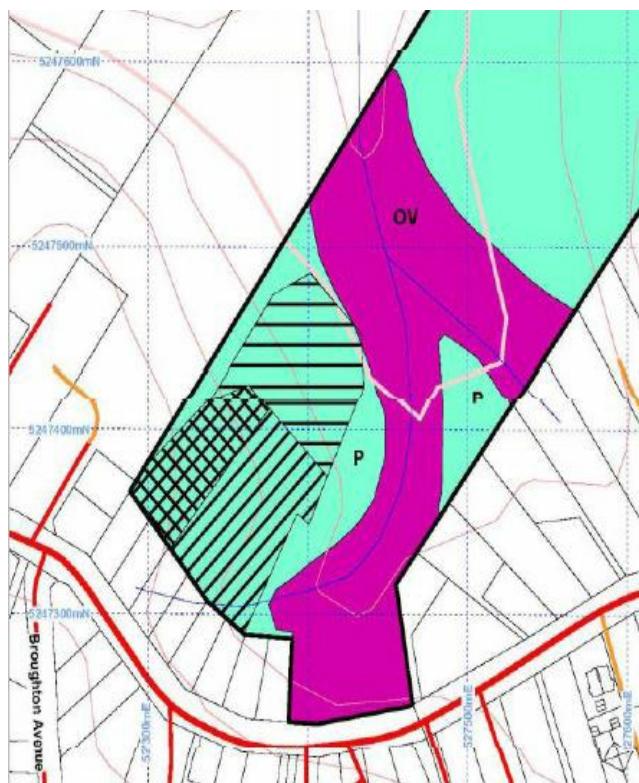
- A Vegetation Assessment report by North Barker Ecosystem Services (2005); and
- A Statement of Findings letter by Environmental Consulting Options Tasmania (2016);
- A letter from PDA Surveyors dated 14 August 2018; and
- The PDA Surveyors Plan of Subdivision.

Key findings of the Vegetation Assessment include:

- The western end of the site has been utilised for horse grazing for many years which has impacted upon the structure and floristics of the vegetation.
- The site supports two native vegetation communities – black gum (*E. ovata*) shrubby forest and white peppermint (*E. pulchella*) grassy forest [*'Eucalyptus ovata* forest and woodland' (DOV) and '*Eucalyptus pulchella* forest and woodland' (DPU) under the TASVEG 3 classification system.]
- The DOV community is associated with the moist environments around the Lambert Creek and tributaries. It includes *Eucalyptus obliqua* (stringybark) as a sub-dominant canopy species. Blackberry is common forming scattered patches throughout the community and regionally.
- The DPU community dominates the vegetation on the property and includes blue gums (*Eucalyptus globulus*) and black gums (*E. ovata*) as sub-dominants, with blue gums being co-dominant in places. This facies of *E. pulchella* forest is significant for the prominence of blue gums.
- *Eucalyptus ovata* forest is classified at the highest level of threat - endangered at both statewide and bioregional level. Less than 13 000 ha remain in Tasmania representing approximately 7% of the original pre-European extent. Of 3250 ha mapped in the Southeast bioregion only 206 ha are protected in conservation reserves.
- *Eucalyptus pulchella* forest is widespread and common state-wide with 152 000 ha mapped representing 76% of its pre European extent. In the Southeast Bioregion there are 143 000 ha of which 32 000 ha are protected in reserves.
- One vascular plant species listed as 'rare' under the Tasmanian *Threatened Species Protection Act 1995* was recorded on the property - tall wallaby grass (*Rytidosperma indutum* previously *Austrodanthonia procera*). [This was recorded from the northern corner of the lot outside the area of the proposed subdivision.]
- A number of typical environmental weeds occur on the property with many of these scattered at moderately low densities. One species of particular concern is *Erica arborea* (tree heath). Blackberry (*Rubus fruticosus*) is widespread and locally prominent within the moist soils associated with the drainage lines where it forms some large patches up to 10m across.
- The vegetation on the property provides habitat for swift parrots (*Lathamus discolor*) which are listed as endangered under the Tasmanian *Threatened Species Protection Act 1995* and critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999*. This is a nectivorous summer visitor that relies primarily on blue gum (*Eucalyptus globulus*) and black gum (*E. ovata*) for foraging during the breeding season. The main threat to this species is habitat loss. One difficulty in curtailing the loss of habitat is the incremental nature of the loss as many large and small stands are cleared independently for various reasons over time. The sum of combined small losses is significant. Blue gums are widespread across the property.

Black gums are abundant along the drainage lines but also extend into the DPU forest in the south west portion of the property. Swift parrots were recorded on the property during the survey. Potentially suitable nesting trees appear to be present.

The vegetation map from the Vegetation Assessment report is reproduced as Figure 4 below. The weeds and threatened flora map from the Vegetation Assessment report is reproduced as Figure 5.



#### Vegetation

	OV shrubby <i>E. ovata</i> / <i>E. viminalis</i> forest
	P <i>E. pulchella</i> / <i>E. globulus</i> / <i>E. viminalis</i> forest

#### Horse paddocks

	Badly degraded
	Moderately degraded
	Slightly degraded

Figure 4: Mapped vegetation communities (from North Barker, 2005)

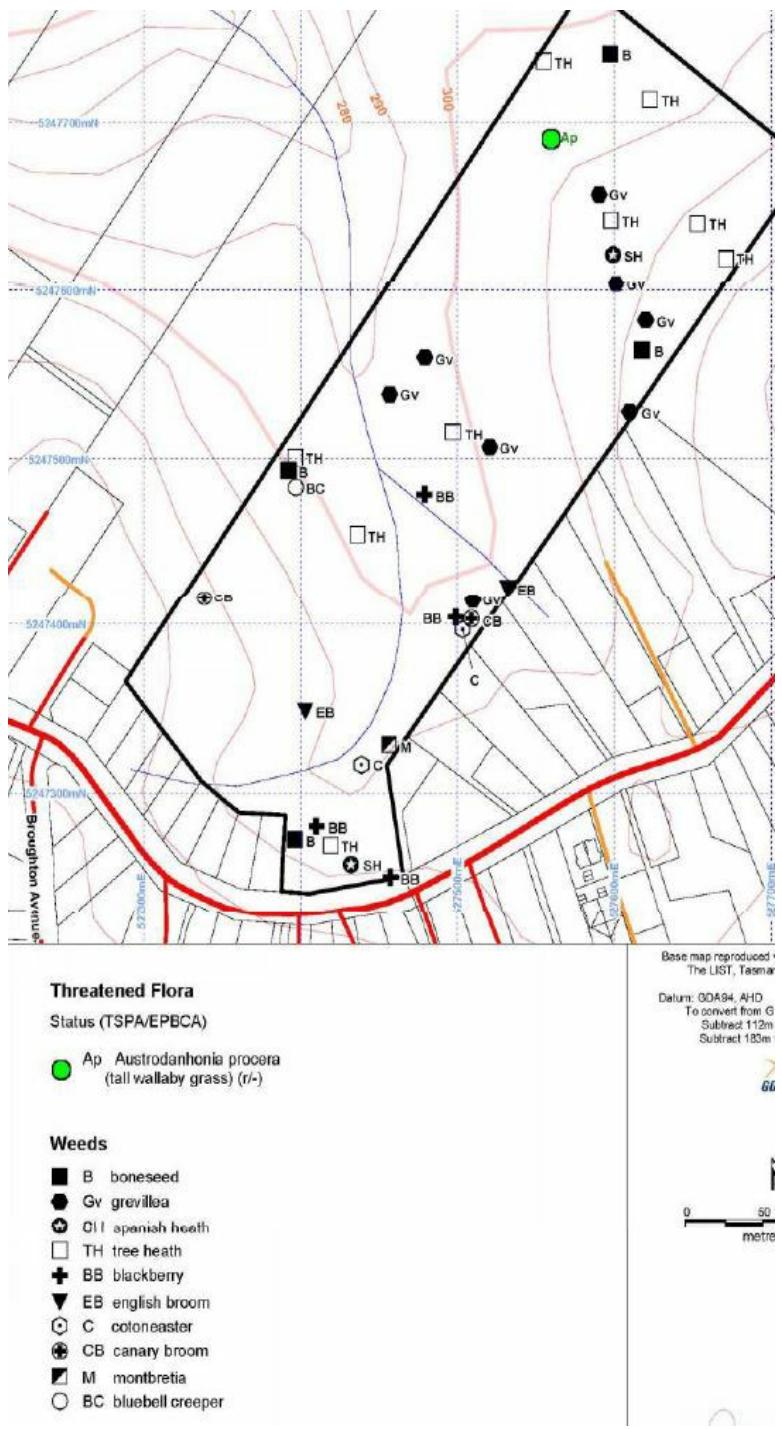


Figure 5: Mapped weeds and threatened flora (from North Barker, 2005)

Since the preparation of the North Barker report in 2005, recognised key threats to swift parrots now also include collisions with man-made structures and predation by sugar gliders as well as habitat loss. Also, *Eucalyptus ovata* forest and woodland vegetation has been nominated for listing (in the category 'Black Gum - Brookers gum forest/woodland') under the Federal *Environment Protection and Biodiversity Conservation Act 1999* by the Threatened Species Advisory Committee in the 'critically endangered' category (the highest category aside 'extinct in wild' and 'extinct'). Draft conservation advice has been produced.

The Vegetation Assessment report included the following comments about the significance of the natural values on the property:

*The location of the property is of strategic significance from a conservation perspective. It incorporates the headwaters of Lambert Gully which is mostly located within the HCC managed Skyline Reserve. It includes significant forest community habitat for one listed*

*plant species and a number of foraging trees for the Swift Parrot.*

*The presence of the rare plant species Tall wallaby Grass (*Austrodanthonia procera*) is not regarded as highly significant in the overall conservation context of this species...*

*The site includes core foraging habitat for the swift parrot (*Lathamus discolor*). Of particular significance are the black gums (*E. ovata*) and the larger canopy blue gums.*

*Eucalyptus ovata forest is arguably one of the most significant forest communities in the State and is currently very poorly captured in public reserves. The community on site is in moderately good condition and structurally intact although it has some weed infestations.*

*Overall the site can make a contribution to conservation. The presence of a significant area of dry forested vegetation in relatively good condition and in close proximity to Hobart would provide a refuge for a number of plant and animal species...*

The Vegetation Assessment report had been prepared prior to any subdivision proposal being developed, but included the following comments about the potential impacts associated with subdivision of the land:

*The impact of any subdivision will depend on the extent of bushland clearance of the lots. Clearance, weed spread, predation by pets and effluent spread could all impact on the biological values. The most significant impact is the potential loss of the foraging habitat of the swift parrot.*

*There is however opportunity through the planning approvals process to achieve an outcome that secures the most significant areas for conservation. The current practice of horse grazing, perfectly acceptable within the current zoning has destroyed much of the conservation values of one small area and these impacts have been extended in recent times to new areas which will ultimately themselves be degraded. The understorey is replaced with pasture species and weeds and the processes of natural recruitment are prevented resulting in the long term decline and ultimate loss of native vegetation from the system. It would be preferable to lose a portion of the vegetation to residential development to ensure certain security for the balance.*

*The presence of swift parrot foraging habitat within close proximity to residences can result in an increased bird strike hazard resulting from collisions with fences and windows. Any additional housing potentially increases this risk although guidelines developed to minimise this hazard would reduce the risk.*

The Vegetation Assessment report includes the following recommendations:

- The positive approach to achieving the best long term conservation outcome for the property should be a driver in the planning approvals process. The opportunity provided through this project to ensure positive conservation management for the most significant values on the property should be taken. The consideration of adequate offsets for any incurred losses to secure the most significant areas for conservation should be sought.
- There is a challenge reconciling bushfire hazard minimisation with the protection and maintenance of biodiversity values in bushland areas. Residential development at this site even on a small scale could result in broader impacts to the adjacent bushland to meet any bushfire hazard minimisation requirements. A fire management plan should be developed that identifies a prescription for management of bushland for retention that is designed to ensure the best viability of the vegetation and include measures to allow for recruitment in the long term.

- The importance of maintaining existing trees wherever possible needs to be stressed. It will be many years before planted trees reach a size and maturity that allows flowering to provide a worthwhile food source for the swift parrot. It is thought that blue gums reach their most prolific flowering when they are 400mm in diameter or larger.
- The development application should clearly identify the extent of bushland clearance and quantify the number of trees that will be affected and the number (proportion) that can be secured for conservation to offset these losses.

The submitted ECOTas Statement of Findings letter includes the following key findings:

- *In my opinion, the report by North Barker Ecosystem Services is thorough, detailed and appropriately addressed ecological matters. While I concur with Council that it has now been approximately a decade since the report was prepared, I do not believe that a whole new report is necessary.*
- *In my opinion, the vegetation mapping provided in NBES (2005) is accurate and suitable for consideration of approval of the subdivision, including development of any offset/mitigation strategies and bushfire hazard management planning.*
- *...some of the vegetation originally mapped as DOV has now been cleared as part of the approved access to the northern part of the title on the other side of Lambert Rivulet and if now mapped, part of the slope adjacent to Nelson Road could be included in “Eucalyptus obliqua dry forest” (TASVEG code: DOB), a non-threatened vegetation type. This is mentioned because it is part of my consideration of the potential impact of the subdivision proposal on ecological values and the appropriateness of the proposed offset.*
- *I have reviewed the most recent plan of subdivision provided by PDA and strongly endorse the proposal to exclude development along Lambert Rivulet, with virtually all the DOV (threatened) vegetation captured within this proposed reserve. My understanding is that there can now be a headwater to sea reserve along Lambert Rivulet, capturing a range of vegetation types including some high quality DOV on this particular title (which extends to the title to the west). While development on the slope adjacent to Nelson Road will result in a small loss of DOV (as mapped), in my opinion this is acceptable in the context of the proposed reserved system along Lambert Rivulet. [Note this report was prepared for one of the previous iterations of the proposal that included proposed new residential lots fronting Nelson Road.]*
- *The original report by NBES did not find any sites of threatened flora from the forest south of Lambert Rivulet. My additional site assessment concurs with this finding.*
- *...the proposed subdivision design includes reservation of virtually all the threatened vegetation (DOV) and much of the potential foraging habitat of the swift parrot.*
- *[With regard to the North Barker commentary regarding the risk of swift parrot collisions with development] ...I do not believe that specific mitigation that can be applied at the level of subdivision planning is practical. There are some guidelines available (*Minimising the Swift Parrot Collision Threat: Guidelines and Recommendations for Parrot-safe Building Design – WWF (2008)*) that may be applicable for individual residences, although I am reluctant to endorse these because of the practicality of their application and the lack of supporting evidence for some of the specific guidelines. That said, some of the general principles I believe are sound but these should only be applied to a more detailed proposal (such as a residence) and will*

need to be considered very much on a case-by-case basis.

- *In my opinion, the proponent has offered an offset/mitigation strategy in relation to threatened vegetation and potential habitat of the swift parrot that should be strongly endorsed by all parties because it will result in a headwater to sea reserve along Lambert Rivulet connecting several reserves and will include substantial areas of habitat for the swift parrot (and other threatened fauna species). I rarely encounter such well-considered land use proposals...*

No specific recommendations to minimise impacts on natural values were included in the statement.

The letter from PDA Surveyors provided the following additional information about change in the condition of the vegetation since the North Barker Vegetation Assessment:

- *Based on the photographs and descriptions in the North Barker report, it is clear that the general condition of the vegetation in the area of the former horse paddocks has improved in the intervening period with the removal of horses and the cessation of grazing by stock...*
- *Using the same general qualitative classification adopted by the authors, areas mapped by North Barker as 'highly degraded' could now be described as 'moderately degraded' and areas mapped as 'moderately degraded' could now be described as 'slightly degraded'...*

The vegetation community mapping presented on the Plan of Subdivision is slightly different to that in the Vegetation Assessment in that:

- a small area (398m<sup>2</sup>) of forest within the proposed POS lot was classified as '*Eucalyptus obliqua* dry forest' (DOB) by PDA rather than DOV; and
- some of the vegetation within the area of the proposed residential lots 2, 3 and 4 was mapped as DOV by PDA rather than DPU.

Based on the submitted documents, my estimates of the different vegetation communities present in the different areas of the proposed subdivision are presented in Table 1 below.

	Total	Area in POS	% in POS	Area Lots	% Lots
<b>DOV</b>	14,310m <sup>2</sup>	12,903m <sup>2</sup>	90%	1407m <sup>2</sup>	10%
<b>DPU</b>	20,085m <sup>2</sup>	5,176m <sup>2</sup>	26%	14,909m <sup>2</sup>	74%
<b>DOB</b>	398m <sup>2</sup>	398m <sup>2</sup>	100%	0m <sup>2</sup>	0%
<b>Total</b>	34793m <sup>2</sup>	18,477m <sup>2</sup>	53%	16,316m <sup>2</sup>	47%

Table 1: Breakdown of different vegetation communities present within the different parts of the site (i.e. public open space lot vs road and residential lots)

With regard to the threatened DOV community, it is significant to note that 90% of the vegetation present would be captured by the proposed POS lot. However, there would be a temporary loss of some of this vegetation within the POS for installation of the sewer and stormwater mains. On the other hand, it is likely that some of the DOV vegetation on proposed lots 3 and 4 could be retained when house applications and site-specific BHMPs are prepared for those lots, so it is likely that the area of DOV vegetation ultimately lost would be 10% or less.

As indicated in the North Barker report, '*Eucalyptus ovata* forest and woodland' is a community under considerable threat. It is listed as threatened under the *Nature Conservation*

Act 2002 and according to the North Barker report, only 7% of the original pre-European extent remains and only around 6% of that remaining in the Southeast bioregion is protected in conservation reserves (noting that the figures are likely to have changed since the report was completed in 2005).

Some of the DOV vegetation on proposed lots 2, 3 and 4 is relatively close to some older existing dwellings along Nelson Road, and in my opinion represents an unacceptable bushfire hazard to these properties. The removal of some of this vegetation is warranted, in my opinion, to provide adequate fuel-reduced buffers for these dwellings.

Based on the submitted documents, my estimates of the swift parrot foraging trees present in the different areas of the proposed subdivision, and the numbers likely to be removed or significantly impacted by the essential subdivision works, are presented in Table 2 below.

Tree	Total	Number in POS	% POS	Number on Lots	% Lots	Number Likely to be Removed for subdivision works
<b>Small Blue Gum</b>	33	13	39%	20	61%	
<b>Medium Blue Gum</b>	14	8	57%	6	43%	
<b>Large Blue Gum</b>	14	7	50%	7	50%	
<b>Total Blue Gums</b>	<b>73</b>	<b>28</b>	<b>38%</b>	<b>45</b>	<b>62%</b>	<b>6 (8%)</b>
<b>Small Black Gum</b>	206	178	86%	28	14%	
<b>Medium Black Gum</b>	46	42	91%	4	9%	
<b>Large Black Gum</b>	8	5	63%	3	37%	
<b>Total Black Gums</b>	<b>260</b>	<b>225</b>	<b>87%</b>	<b>35</b>	<b>13%</b>	<b>3 (1%)</b>
<b>Total Foraging Trees</b>	<b>321</b>	<b>253</b>	<b>79%</b>	<b>68</b>	<b>21%</b>	<b>9 (3%)</b>

Table 2: Breakdown of different foraging trees present within the different parts of the site, and those likely to be removed or damaged for essential subdivision works, by size class.

It is important to note that a significant number of the black gum and blue gum trees on the residential and road lots can be retained. It is unclear why it has been proposed to remove all foraging trees from the indicative building areas, as it would not be essential to remove all these trees to facilitate residential development including the establishment of bushfire HMAs. It appears unlikely that many foraging trees within the POS lot would need to be removed or would be damaged by the proposed hydraulic infrastructure.

It is also important to note that only those trees with a trunk dbh greater than 40cm represent a significant foraging resource, while trees with a trunk dbh greater than 70cm are considered to be by far the most significant due to the quantity of flowers produced. Of course those trees with a dbh of >40cm represent a potential future foraging resource.

Table 2 shows that the vast majority (87%) of the black gums would be retained within the POS lot, including 87% of the trees with a trunk dbh greater than 40cm. A much smaller proportion of the blue gums would be captured by the proposed POS lot (38%), however it would capture 53% of the blue gums with a trunk dbh greater than 40cm.

Trees with hollows are a significant habitat feature for birds and arboreal mammals that are generally afforded substantial significance in natural values assessments. Eucalypts with a

trunk dbh greater than 70cm are also considered to be potential nesting trees for swift parrots (i.e. old enough that hollows could be present). With regard to hollow bearing trees, PDA provided the following statement (*pers. comm.*):

*No hollow-bearing trees were recorded in the area of the proposed residential lots during this survey work, but several large blue gums occur that could support unseen hollows. Several hollow-bearing trees were recorded within the proposed POS lot and the large balance lot.*

With regard to the significance of the vegetation as foraging habitat for swift parrots, the draft *Swift Parrot Species Habitat Planning Guideline* (FPA, 2010) is understood to be the most definitive document available for such assessments. While more suitable for landscape-scale assessment, these guidelines are used to identify 'low', 'medium' and 'high' density foraging habitat based on the proportion of black gum and blue gum trees >40cm dbh. Based on the tree mapping provided, aerial photography and ground investigation of the site, it would appear that the proportion of foraging trees on the land proposed for the road and residential lots is >30% of the trees present and therefore qualifies as 'low density foraging habitat under these guidelines.

While the impact on trees would largely result from future development of the proposed lots rather than the subdivision works, maximising the retention of significant foraging trees is important to minimise the impact of the proposal at both the subdivision and future development stages. Adjustments in the subdivision design have been made by the applicant to maximise retention of the larger blue gums, including increasing the size of the road lot to retain four of the larger blue gums within the road reserve.

The proposed means of vegetation removal has not been specified, however it would most likely be via machinery such as bulldozers or excavators. These tend to be more damaging to the soil and more indiscriminate with higher levels of collateral damage than hand held equipment such as chainsaws. There may be a need to stipulate the method of clearing in areas of high sensitivity such the DOV community. This should be addressed in a subdivision construction management plan.

Potential erosion and land instability are not expected to be major risks associated with the subdivision works given the gradients and soil types. In my opinion these risks can be adequately addressed as part of a construction management plan.

There is a risk of degradation of water quality in Lambert Rivulet as result of vegetation clearing for the subdivision works, primarily as a result of increased sediment transfer, however these potential impacts are expected to be minor and increased sediment transfer can, at least in part, be addressed by a construction management plan including soil and water management measures. Impacts on water quality are likely to be greater following the development of the lots including bushfire hazard management areas, however impacts from vegetation clearing are unlikely to be significant given the separation distance between the proposed residential lots and the watercourse, and if treatment of the stormwater occurs.

Impacts upon amenity and landscape values of the vegetation will be assessed by other Council officers.

With regard to the protection of biodiversity, habitat and wildlife corridors, there a number of biodiversity impacts associated with vegetation clearing for the subdivision and future lot development, most notably loss of foraging habitat trees for swift parrots and loss of a threatened vegetation community.

It is important to note that swift parrots were observed on-site foraging in the blue gum trees during the North Barker survey, so the foraging habitat present is highly likely to be utilised by birds in the future (if they are not destroyed) as opposed to just being potential habitat.

The Tasmanian Government's *Threatened Species Link* website indicates that the main threats to the species are the loss of foraging and nesting habitat, predation by sugar gliders, and mortality of adults through collisions with man-made structures such as windows and chain-link fences. It recommends that the main activities to be avoided are cutting down blue gums and black gums, cutting down hollow bearing trees and building structures that cause collision mortalities.

No trees with nesting hollows would be affected and a large number of the foraging trees can be retained. Future houses can be designed to minimise the risk of bird collisions, however this would need to be required by a Part 5 Agreement as there is no head-of-power to require bird-friendly house design under the *Hobart Interim Planning Scheme 2015*. A condition to this effect is recommended.

As there is no current justification for clearing all the habitat trees within the indicative building areas, it is recommended that a condition be applied to any permit granted prohibiting the removal of trees unless essential for the subdivision works including service provision, the public road and private lot accesses.

Subject to the recommended conditions, in my opinion the proposal is acceptable under the assessment criteria and the exercise of discretion is recommended.

#### Schedule Q Storm Surge and Flood Prone Land

Schedule Q applies as parts of the site meet the definition of flood-prone land (Lambert Rivulet and the areas immediately adjacent the Lambert Rivulet).

Performance Criterion P1.1 states the following:

*The design and siting of development must:*

- (a) *have habitable rooms with a FFL above the storm surge level or at least 300mm above the flood level where new buildings or subdivision are proposed, and*
- (b) *ensure the free flow of flood or tidal waters; and*
- (c) *avoid concentrating flood or tidal waters, or intensifying flow velocity on land up or downstream; and*
- (d) *avoid net loss of flood storage and or conveyance on land within the Floodplain; and*
- (e) *avoid damage to or loss of existing or future proposed buildings or works, and the associated potential risk to human life from potential flood/storm surge; and*
- (f) *not increase the level of risk of hazard for the site or for adjoining or nearby properties or infrastructure; and*
- (g) *avoid or minimise the risk of water pollution from inundation of any materials, substances or wastes on the site.*

Flooding issues for the proposed new lots will be minimal as the areas where dwellings would be constructed are outside the flood areas.

The free flow of flood waters will be maintained under the proposal. Concentration will not occur. There would be no increased risk of flood damage, risk to human life or water pollution associated with flooding.

Requirements for inundation free land under LG(BMP)A 1993 will also be met.

#### Representations

Five representations were received that included environmental planning matters. The environmental planning matters raised in those representations are summarised in Table 1

below together with comments on those matters.

### Matter Raised

The proposed building areas for each new lot has been designed to provide maximum flexibility for future owners/developers. Importantly, the BHMP requires that the entire area of Lots 1-9 is required to be managed as a 'hazard management area'. Furthermore, it is silent with respect to the actual extent of vegetation removal that is required. In the absence of any prescriptions or guidance within the BHMP, it must be assumed that future owners may remove all vegetation, with the exception of the specific trees identified for retention on the amended subdivision plans. The absence of any guidance will also make it extremely difficult for building surveyors to assess whether future building work meets the requirements of the BHMP.

### Comment

The submitted BHMP was only intended to be indicative to demonstrate that the proposed residential lots will have sufficient size and dimensions to support dwellings with BAL-19 hazard management areas, and it is recommended that the BHMP is not approved under this permit. This will mean that future dwelling developments will need individual BHMPs tailored to the individual proposal. The benefit of this approach is that hazard management areas can be reduced to the minimum size necessary to satisfy the Building Regulations based on the actual house footprint and location. It will also allow for close scrutiny of proposed hazard management areas including the specific requirements for management of vegetation. This will allow for site-specific assessment of proposed vegetation removal and in particular individual swift parrot habitat trees.

It is understood that the intent of the 'Part 5 Agreement' area shown on the subdivision plans was to identify an area of the residential lots where swift parrot habitat trees (and other vegetation) could

potentially be retained, rather than the area where landowners would have the right to management vegetation on adjacent lots. However, as discussed above I can see no reason to approved the clearing of trees within the indicative building areas unless essential to facilitate the subdivision, and a condition to this effect is recommended.

To address the issue of bushfire HMAs needing to be implemented on adjoining lots, I recommend a permit condition requiring a Part 5 Agreement that requires landowners to allow management of vegetation on their lots to the extent necessary to establish and maintain a bushfire HMA for an approved BHMP based on BAL-19 construction or higher.

The new proposal provides a 'Part 5 Agreement Area' that encompasses the rear part of Lots 3-8. It is understood that this is intended to provide a mechanism for ensuring each landowner can establish and manage the required hazard management area in the event that the neighbouring lots have not yet been developed. Curiously the Part 5 Agreement Area does not include the front half of the subject lots, hence the benefitting lot owner would only have the right to maintain the rear portion of an undeveloped neighbouring land whilst adjoining land immediately on either side of the building work (the front half of the 2 neighbouring lots) would be left in a hazardous state. This clearly will not provide the required level of protection from bushfire hazard. A far better simpler solution to address the hazard on adjoining lots would be for the BHMP to require that building areas and hazard management areas be established by the subdivider as part of the civil works and maintained in perpetuity by the respective owners to ensure all building areas can achieve BAL-19.

It must be noted that the ecological impact associated with managing Lots 1-9 in their entirety as a hazard management area is not specifically considered in the supporting documentation. The ECOtas addendum report does not specifically consider the current proposed layout, nor does it acknowledge that the total area of bushland that is proposed to be heavily modified (i.e. the sum area of Lots 1-9). The further information provided more recently by PDA Surveyors indicates that the proposed Part 5 Agreement includes a requirement to protect specific trees within the defined Part 5 Agreement Area whilst trees within the building areas will be removed.

Based on the preceding discussion in this submission it is clear that the proposal in its current form does not demonstrate that impacts resulting from hazard management will be minimised as far as is practicable. The proposed building areas are all significantly greater than the minimum building area requirement specified in the scheme (the smallest proposed building area is over twice the minimum size that is prescribed for the Low Density Residential Zone).

The NB (2005) report is a far more relevant response to current ecological issues than the ET (2005) letter.

Although a formal vegetation site survey was performed in 2004, it states that a number of threatened flora species may have been missed due to the timing of the survey. No additional survey appears to have been performed since 2004.

As discussed above, it is recommended that the indicative BHMP and the unnecessary removal of vegetation within the indicative building area is not approved and is considered more thoroughly for future individual lot developments.

Agree. See previous comments.

Agree.

Three of the six threatened flora species identified in the North Barker report as being recorded in the vicinity are associated with creek lines, and most of the proposed subdivision works and residential lot would not impact upon these creek lines. The North Barker report indicates that the survey was conducted outside the flowering (identification) period of two of these six species. The North Barker report indicates that the survey time (early summer) is perhaps the optimum time to capture the broadest range of species on the site. Follow-up surveys for threatened flora were not recommended in either of the submitted natural values documents.

There is no evidence that any formal on-site survey for habitat use by threatened fauna (e. g. scats, dens, remote camera monitoring).

The North Barker report indicates that the only highly significant habitat present is for swift parrots. The ECOTas statement suggests that it is likely that Tasmanian devils and eastern quolls utilise the site at times, but suggests that no significant features (e.g. dens) are present and makes no recommendations for further consideration of these species. In my experience, targeted fauna surveys would be an unusually-high level of investigation for a natural values survey at the local government level for a relatively small development where the general habitat is not of high significance, and I have relied upon the expert judgement of the consultants as to whether such targeted surveys are necessary for this site.

There has been no additional input in relation to the proposal from the ecological consultants in the relation to the current amended application. It is also clear that based on the PDA (2018) letter the site has improved in ecological condition since 2004. The ET(2016) report did not do any formal surveying for threatened vegetation species. At this time the presence of any threatened, vulnerable or rare vegetation species is based on a survey 14 years ago

It is correct that there has been no additional input in relation to the current amended proposal from the ecological consultants. Since the ECOTAs report, the proposal has been amended to substantially increase the area of land within the POS lot and reduce the area of land within the residential lots. Most notably, the proposed lots fronting Nelson Road that support the threatened DOV forest have been removed from the proposal. Given that the previous proposal was strongly endorsed by the ecological consultant, it follows that they would also endorse the current proposal that has a lesser impact on the most significant biodiversity values of the site. It is unclear whether a formal survey for threatened flora was conducted by ECOTAs, however it is likely that only an informal survey was conducted. The ECOTAs letter states the following:

*The original report by NBES did not find any sites of threatened flora from the forest south of Lambert Rivulet. My additional site assessment concurs with this finding.*

ECOTAs did not recommend any further surveying for threatened flora. It is possible that threatened flora have emerged on the site since the North Barker report and were overlooked by ECOTAs, and a condition could be applied to any permit granted requiring a follow-up survey. If any threatened flora were recorded and were likely to be disturbed, a permit would be required under the *Threatened Species Protection Act 1997*.

The assessment of ecological impacts by Et (2016) restricts its discussion to the areas of the original subdivision and proposed public space. It is clear however that in the time between the original NB (2005) report and the Et (2016) letter that a development had occurred in the northern portion of the title. There is no discussion as to the relevance of impacts of this development (vegetation clearing, road access or bushfire management) on the ecological values of the site as whole. It is apparent that some of the impacts of the development on the northern part of the title (removal of habitat trees, removal or modification of DOV) are similar to the current development. What, if any, prescriptions were imposed on this development and how do they relate to the current proposal?

Existing and approved developments on the balance lot are not considered relevant to this application.

No assessment has been carried out on the potential effect to waterways (specifically the Lambert Rivulet and downstream waterbodies) by the proposed increase in residential density and its associated infrastructure.

A waterway and coastal protection zone is present around all of the Lambert Rivulet. This zone is in close proximity to lot 5 and around 400 m<sup>2</sup> is within lot 4. No consideration has been given in relation to the impacts of disturbance or clearance and conversion of the riparian zone of the creek.

Similarly there is no assessment of impacts on water quality or quantity in the rivulet by the development. It should be noted that runoff from the proposed new road and residences in the original proposal was transferred directly to the rivulet via stormwater infrastructure. It is not clear on the new plan where stormwater will be collected and discharged.

There is no assessment of the extent or proportion of clearing of vegetation other than Blue and Black Gums. The majority of the subdivision area is characterised as *Eucalyptus pulchela* (DPU) forest. Based on the assessment of Blue and Black gums (which are considered sub-dominant in this vegetation type) there is likely to be a significant amount of *E. pulchela* within the subdivision area that may be high quality habitat trees for hollow dwelling species. Similarly although the Blue and Black gums are assessed based on their foraging quality and quantity the presence of 38 trees >0.7m in diameter and potentially many similarly sized *E. pulchela* habitat trees indicates that the site should be assessed as potential nesting habitat for swift parrots.

It is correct that the application documents did not include an assessment of the potential impact upon Lambert Creek. This was not deemed essential as the risk to Lambert Creek is considered to be relatively low and conditions are recommended to ensure risk are minimised, including construction management, retention of vegetation, stormwater treatment and scour protection.

It is correct that parts of the riparian setback area for Lamber Rivulet are within Lot 4. However, the watercourse in this part of the site is an ephemeral drainage line with no defined watercourse features and is more of a low point in the topography than a true watercourse. Sheet 2 of the Plan of Subdivision shows the proposed stormwater lines and outfalls.

The submitted documents provide adequate information to estimate the relative proportions of the different vegetation communities that would be on the POS lot and on the road and residential lots (refer to Table 1). The site was assessed for the presence of potential nesting hollows by Mr Jim Mulcahy of PDA. No trees with nesting hollows were detected within the proposed residential or road lots during that assessment.

Clearance of Blue Gums and Black gum should be considered against the Swift Parrot Species Habitat Planning Guideline – working draft 5 November 10 to determine its potential as foraging and breeding habitat. Reductions in foraging area within 10km of nesting sites are considered a likely contributing cause of Swift Parrot decline. There is a number of known Swift Parrot nesting sites within 10km of the site. The quantification of Blue and Black Gums confirms that there is a significant amount of high or medium quality foraging habitat present but a proportion of these will be removed (4 trees >0.7m diameter and 6 trees 0.4-0.7m diameter). The proposal includes an area of POS and a proportion of the new lots will be subject to a Part 5 agreement that presumably will protect the environmental attributes of these trees. However, a significant proportion of the Blue and Black Gums on the site will be on the balance of the lot with no formal protection.

The NB (2005) report considers the potential for environmental impacts both at the subdivision and further development stage (residential living) however Et (2016) considers that consideration of impacts at a later stage of development is inappropriate.

The development will lead to loss of foraging habitat within a known foraging area of Swift Parrots. In addition the additional infrastructure and traffic could lead to direct impacts on this species through collision with vehicles and other infrastructure. Clearly the majority of impacts from the development will come when residences are built on the lots (e.g. vegetation clearance, bird strike, weed spread, stormwater runoff, predation by domestic animals), however many of these impacts relate to the position and size of the lots and should be considered at the design stage in order to properly consider mitigation strategies for all stages of the development.

The Et (2016) letter purports that any removal of Blue Gum and Black Gums within the DPU forest should be considered in the context of the area of trees to be retained (presumably as an offset) in the open public space. This is inconsistent with the current offset principles where the offset area should be as far as possible “like for like”. DPU and DOV are different forest communities, at this site both contain Black Gums but the DPU is likely to have a higher proportion of Blue Gums based on the NB (2005) report.

The foraging habitat for swift parrots is considered to be 'low density' under the FPA draft guideline. The applicant has advised that currently there are no nesting trees available, however the loss of the larger trees (>70cm dbh) would mean the loss of potential future nesting habitat.

Consideration of future development of the proposed lots is essential as part of a subdivision and has been considered in this assessment. Future lot development however will be assessed in detail as part of the assessment of those applications.

Likely future vegetation clearing is considered as part of this assessment. Bird strike can be addressed through requiring future development to comply with the WWF collision guidelines via a Part 5 Agreement. Stormwater treatment will be required as a condition of approval that will deal with increase pollutant loads when the lots are developed.

In terms of individual swift parrot foraging habitat trees, trees within the DOV forest as opposed to the DPU forest are considered 'like for like'.

Both Blue gums and Black Gums provide foraging habitat when they flower. Generally these two species flower at different times providing a longer foraging time for Swift Parrots. Both these species therefore should be afforded a very high level of protection with as many trees as possible being retained and protected both within the project area and on the balance of the title.

Based on the maps provided in the amended proposal (2018) there will still be a loss (~400m<sup>2</sup>) or substantial modification (~1400m<sup>2</sup>) of DOV in lots 2, 3 & 4. It is important to consider that when dealing with a relatively small patch of a forest community that long term viability is dependent on successful recruitment and long term health. Generally bushfire hazard management actions (clearance of understory, removal of coarse woody debris, thinning of canopy trees) would substantially reduce recruitment success and also provide greater potential for the establishment of environmental weeds. It is clear from the mapped distribution of Black Gums that most of the Bushfire Management zone contains small to medium sized Black Gums and that recruitment of this species is occurring upslope from the creek into the subdivision area (particularly lots 6, 7 & 8). Retention of the smaller Black and Blue Gum trees should be a priority within the bushfire management zone.

Agree. Only a small number of foraging trees would be removed for the subdivision works and non-essential clearing should be prohibited so that any later clearing is assessed under future development applications. While some of these trees are likely to be removed, in my opinion a large number are likely to be able to be retained when the lots are developed. The foraging habitat trees on the proposed balance lot can't be removed without further approval.

A significant area of DOV vegetation is located on the proposed residential lots (approx. 1400m<sup>2</sup>). Some of this vegetation may be able to be retained when the lots are developed, however it is likely that the majority will be removed or substantially modified. Future dwelling BHMPs can be devised to ensure modification of the vegetation is minimised and recruitment maximised as far as possible while still providing adequate bushfire safety. In addition, in my opinion the removal of some of the DOV vegetation on Lots 2, 3 and 4 adjacent the existing dwellings on Nelson Road is necessary to provide a reasonable level of bushfire protection for these properties which currently have inadequate hazard management areas.

The proposal intends to retain some of the DOV in a public open space, however there does not appear to be a proposal to formally protect the remainder of the DOV on the balance of the lot. How because:  
the designation of DOV as a public open space will preserve this community is not discussed. Whilst a part 5 agreement is discussed in relation to the development area of the site the mapping indicates that this will only cover the area of bushfire management indicated on the plan. No overall vegetation management plan is proposed either in relation to native vegetation or weed species. Formal reservation of all of remaining the DOV community and all the remaining Blue and Black Gum trees on the title should be a high priority.

The starting point for the consideration of impacts of a development on significant ecological values is through a mitigation hierarchy. The first consideration is whether impacts can be avoided or minimised, followed by remedying of the impacts on site, followed by mitigation options within the footprint area of the development, followed by offsetting some or all of the residual impacts (Guidelines for Natural Value surveys DIPWE, 2015).

Clearly the current proposal has the potential to impact a number of significant ecological values however no options for avoidance of these impacts is discussed. Although some of these ecological values have been considered in detail there is no holistic consideration of the proposal in the light of all of the known on-site values or potential threats. For instance a portion of the DOV community has already been removed to provide road access to the southern portion of the site, impacts from this development is already apparent (building site clearance and down-slope vegetation clearance). The density of the Swift Parrot foraging habitat (Blue Gum and Black Gums) in the proposed subdivision and the removal of DOV make it probable that a subdivision in the North eastern half of the lot may have led to a smaller environmental impact.

Formal protection of the remaining DOV vegetation that would be located on the balance lot is not considered essential

- the area is relatively small;
- planning approval would be required to clear any of this vegetation (unless exempt) under the *Hobart Interim Planning Scheme 2015* and approval is unlikely to be granted; and
- the offset ratio of 9:1 is considered to be an acceptable offset.

In my opinion, the transfer of the POS to Council will afford the vegetation a level of protection that is currently absent. While this is different to formal 'reservation' for conservation purposes, it is more likely that Council would manage the land in a manner that improves ongoing condition and viability (e.g. weeding, preventing grazing and ecological fire management) than would the current owners.

Avoidance has been incorporated into the proposal by placing 90% of the threatened DOV forest (excluding that on and by designing the subdivision to avoid the need to remove many of the larger foraging trees. It is recommended however, that foraging trees are not allowed to be removed unless essential for the subdivision works, so that any proposed removal of these trees can be assessed on a case-by-case basis.

Arguably a subdivision in the north-eastern part of the lot would have less impact upon biodiversity values than the current proposal, however this has not been proposed.

If a development elsewhere on the site was impractical reducing the scale of the currently proposed subdivision could significantly reduce its impact. On the basis of the information available, a smaller 4-5 lot proposal in the south-western corner of the block (incorporating lots 1, & 9, some of the road reserve and some of the southern portions of lots 7 and 8) could have retained all of the DOV and provided a bushfire hazard area that impacted far fewer Blue and Black Gums.

Although the Et (2016) letter states that the proportion of vegetation to be retained would satisfy any legislative requirements it does not supply any data (or reference to current guidelines) to support this contention. Vegetation mitigation strategies are based on both quantity (number of trees or area) and quality, as well as consideration of understory species and other habitat features (i.e. litter and logs). No quantitative assessment of vegetation condition (other than the enumeration of Blue and Black Gums) is provided.

The most relevant document in relation to considering offsets is the 2013 document

*Guidelines for the use of Biodiversity Offsets in the local planning approval process* (GBFO). These guidelines set out seven principles that should be followed when planning an offset. Key principles in the guidelines are:

Principle 1. Offsets are the final component of a mitigation hierarchy Impacts should in the first instance be avoided; alternatives to minimise and remedy must also be thoroughly addressed and only in the event that these actions cannot achieve satisfactory results for biodiversity conservation, impacts should be offset; and

Principle 2. Offsets must deliver a net benefit for biodiversity conservation. When taken as a whole, the benefits of an offset action(s) must be greater than the scope of the adverse impacts on biodiversity values.

It appears that Et (2016) considers that both these principles will be delivered through the provision of 0.85ha of retained DOV regardless of the potential loss of ecological values through clearing or substantially modifying more than 0.6ha of DOV and 1.5ha of DPU. There is no consideration as whether any of these impacts could be avoided or minimised. There is also no consideration of the relative ecological values of the impacted versus retained areas of vegetation. On balance it appears extremely unlikely that the proposal as currently configured would lead to a net benefit for biodiversity conservation.

Agreed, however this has not been proposed.

No quantitative assessment of vegetation condition was provided however qualitative assessments of vegetation condition have been provided.

The proposal includes approximately 1.3ha of DOV within the POS lot and only 0.14ha within the proposed road and residential lots. 1.5ha of DPU would be located within the proposed residential and road lots and 0.5ha within the proposed POS lot. The documents submitted with the application indicate that the condition of the vegetation within the proposed POS lot is better than that within the area of the proposed residential lots.

It is difficult to say whether the proposal would lead to a net benefit for biodiversity conservation without a detailed, formal assessment, however in my opinion the proposal would at least achieve 'no net loss' if the recommended conditions are applied and future lot developments are assessed with a high level of scrutiny and consideration of the biodiversity values.

A primary consideration in relation to the potential impacts of the development on EPBC listed species is whether these would be sufficient to trigger an assessment under the commonwealth EPBC Act.

The current proposal has quantified the number and size both Blue and Black Gums on the site. This has shown that the subdivision will lead to the loss of a number of these trees (17 Blue and 10 Black Gums) but will protect a proportion within the POS and Part 5 area (46 Blue and 250 Black Gums). The remainder of the block however still retains a significant number of these trees (87 Blue and 129 Black Gums). It is particularly worrying that of the larger trees >0.7m diameter (with the highest foraging value) four will be removed and of the remaining 35 trees 16 (46%) are not afforded any protection. Similarly 48 of the 102 trees in the medium value foraging range (0.4-0.7m diameter) are on the balance of the lot.

As some of the Swift Parrot foraging resource will be removed it is important to afford formal protection to all Blue and Black Gum trees on the lot. A possible addition to the requirements of the Part 5 agreement or the addition of a vegetation management plan as part of the conditions of approval could afford this protection.

The DOV forest community is classified at the highest level of threat - endangered and inadequately reserved at both statewide and bioregional level. The current development proposal will lead to significant disturbance or the clearance and conversion of DOV. The actual amount to be cleared or disturbed has not been defined but may be as much as 0.2ha.

This is not a consideration for assessment of the planning application.

In my opinion a requirement to protect all of the potential foraging trees on the balance lot is not essential to satisfy the provisions of Schedule I. The removal of vegetation from the balance lot would require assessment and approval and is considered unlikely that approval would be granted without strong justification. However, if Council were of the opinion that level of impact were still unacceptable, a Part 5 Agreement over the balance lot protecting the DOV vegetation and the swift parrot foraging trees is an option.

Noted.

The most current estimates of the status of DOV at both a state and bioregional (IBRA 6) level are reported the Analysis of comprehensiveness of existing conservation reserves and proposed additions to the Tasmanian forest reserves system (2012). This report gives an estimate for pre European area of DOV for the state of 186,000ha and a current extent of 17,733ha indicating a decline of 90.5% since settlement. It also estimates that only 23% of the current DOV is within reserves at the state level. In terms of the South-East bioregion (that includes the City of Hobart) DOV is estimated to have covered 47,000ha prior to European settlement and to have declined to 4,285ha by 2012, a 91% loss. The percentage of DOV reserved in the South-East bioregion is 22%. Based on the Convention on Biological Diversity strategic plan for biodiversity 2011-2020 all vegetation groups should be preserved at 17% of pre European levels within protected areas. Based on these criteria all current areas of DOV should be protected.

An underlying assumption in the ecological assessments for the proposal is that partial clearance of (DOV) is justified on the basis that the retention of a proportion of this community will lead to a higher level of protection than if left in its present state. The assumption is that the DOV currently has no or little protection and that the transfer of a portion of this community to a different tenure (public open space) will provide a better long term environmental outcome. In reality any disturbance to this community under the present tenure would trigger the provisions of the Forest Practices Act 1985. Clearing or disturbance of any amount of this community on public or private land would require a Forest Practice Plan (FPP) certified by a Forest Practice Officer under the provisions of the Forest Practice Code and the Forest Practices Act 1985.

While the proposal would lead to a small (1400m<sup>2</sup>) loss of the DOV vegetation, it would increase the amount 'reserved' (though not a formal conservation reserve). The removal of some of this vegetation is also considered beneficial for the protection of life and property for the existing dwellings fronting Nelson Road adjacent proposed lots 3 and 4. The proposal is also likely to lead to maintenance or improvement of the condition of the DOV vegetation as a requirement for a weed management plan (including POS) is recommended as a condition of approval, and it is likely that the POS will be managed to a higher degree to maintain or improve the community's condition than under private ownership.

It is correct that removal of this vegetation community would require a FPP unless approved under a planning permit. The proposal is also likely to lead to maintenance or improvement of the condition of the DOV vegetation as a requirement for a weed management plan (including POS) is recommended as a condition of approval, and it is likely that the POS will be managed to a higher degree to maintain or improve the community's condition than under private ownership.

In the context of the current proposal it is important that the status and protection of as much of the ecological values of the DOV community that is impacted by the development is retained by the provisions of the Part 5 agreement. Similarly the management prescriptions within the POS should have the intention of retaining and improving the quality of the DOV community. It would also be prudent to increase the size of the POS to encompass all of the DOV within the balance of the lot (particularly the area between 605 and 629 Nelson Road in to the south of the POS) to ensure future development is constrained to areas of lower ecological value.

It remains for the council to consider the appropriateness of clearing some DOV as part of this proposal in the light of the objectives of sustainable development as defined by Schedule 1 of LUPAA. In the first instance the council needs to consider the current protection of this community against its status after the proposal is approved. Secondly they need to be satisfied that the change of status is likely to deliver a better long term ecological outcome for the community even when a portion of it has been removed.

I commend the proponent for incorporating some of the required information and amending the proposed subdivision to exclude most identified areas of Eucalyptus ovata forest on the site. This will undoubtedly reduce the impact of the proposed subdivision on the natural values of the area and region.

In my opinion, it's not necessary to formally protect the DOV vegetation on the proposed balance lots because:

- the proposed offset ratio of 9:1 is considered acceptable for the development, subject to the recommended conditions.
- Further approval would be required to clear this vegetation, and it is considered unlikely that approval would be granted for any significant clearing.

However, if Council were of the opinion that level of impact were still unacceptable, a Part 5 Agreement over the balance lot protecting the DOV vegetation and the swift parrot foraging trees is an option.

The objectives of LUPAA are a consideration in the assessment, however the provisions of Schedule I are the primary consideration.

There now exists opportunity to ensure long-term protection of these values in the development of a Part 5 Agreement over the balance of the subdivision area also on the larger proposed lot ('residual'). In order to meaningfully protect the natural values on the area the following measures should be incorporated into the Part 5 Agreement:

- All mapped E.ovata forest on the residual lot should be included in the agreement
- The agreement should include measures to correctly assess and protect root protection zones for all works as per Australian Standard -4970-2007-Protection-of-Trees-on Development Sites
- Specify proposed rehabilitation, landscaping and the measures proposed to reduce erosion, maintain the ecological and hydrological values of waterways and protect public infrastructure.
- Specify performance standards for the above environmental works.

The development and implementation of a meaningful Part 5 Agreement should minimise impacts of this development and ensure the development is more consistent with the character of the area and it's importance as habitat for threatened species.

Could you tell me if the proposed sub division at 627 Mount Nelson Road will be to cut down every tree on the proposed site?

This area is a haven for bird life, tawny frog mouth are currently nesting there and the parrots occupy this area. I appreciate that development occurs, but i would hope that no construction will occur for at least 2 more months so that the tawny frog mouth can at least raise their young and leave the area.

And, that there is some intention to allow as much of the natural fauna trees etc in this area as possible.

Many of these recommendations can be achieved by permit conditions on any subdivision permit granted, or future development applications, without the need for a Part 5 Agreement. In my opinion, it's not necessary to formally protect the DOV vegetation on the proposed balance lots because:

- the proposed offset ratio of 9:1 is considered acceptable for the development, subject to the recommended conditions.
- Further approval would be required to clear this vegetation, and it is considered unlikely that approval would be granted for any significant clearing.

However, if Council were of the opinion that level of impact were still unacceptable, a Part 5 Agreement over the balance lot protecting the DOV vegetation and the swift parrot foraging trees is an option.

The removal of all trees on the site should not be approved.

It is extremely unlikely that any works would occur within the next two months given that a number of planning permit conditions would need to be satisfied first. Tawny frogmouths, are relatively common and survive in suburbs, having adapted to human presence.

The recommended conditions and future assessment of residential development aim to minimise the number of trees removed.

## Conclusion

The proposed subdivision will have direct and indirect impacts upon significant environmental values present on the site, both through subdivision works and future development of the proposed residential lots. The subdivision would impact a vegetation community ('*Eucalyptus ovata* forest and woodland') which is listed as threatened under the *Nature Conservation Act 2002*, and which is also likely to be listed as a matter of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). The Comprehensive Regional Assessment forest classification system places this community in the highest status level of threat ('endangered') and the nomination under the EPBCA is for the community to be classified as 'critically endangered' (also the highest status of threat aside from 'extinct in the wild' and 'extinct'). The subdivision would also result in the loss of foraging habitat for a species (swift parrot) listed under the *Threatened Species Protection Act 1995* in the highest category of threat ('endangered') and listed as a matter of national environmental significance under the EPBCA as 'critically endangered'. The subdivision may also impact upon breeding habitat for the swift parrot.

On balance, my recommendation is that Council exercises discretion under clause I.2 of Schedule I of the Scheme. The proposal is also considered to satisfy clause D.6.1 (watercourse setback) and Schedule Q Storm Surge and Flood Prone Land, subject to the recommended conditions.

**Recommended Conditions:**

**An approved Construction Environmental Management Plan (CEMP) must be implemented.**

**A CEMP must be submitted and approved prior to the commencement of works.**

**The CEMP must:**

- show all areas of proposed subdivision works, including ground disturbance and vegetation clearing, in relation to the vegetation communities, swift parrot foraging trees, watercourses and drainage lines;
- show all swift parrot foraging trees proposed to be removed, or likely to have their root zones disturbed;
- specify the proposed works methodology, particularly for vegetation clearing and soil disturbance, and particularly for proposed works within the public open space lot;
- demonstrate that vegetation clearing, vegetation disturbance and soil disturbance has been minimised as far as practicable, and that vegetation and soil disturbance will be the minimum necessary to facilitate the essential subdivision works;
- include proposed measures to help ensure that vegetation and soil disturbance is compliant with the approved CEMP, particularly works in proximity to swift parrot foraging trees, the *Eucalyptus ovata* dry forest/woodland vegetation community and the watercourse/drainage lines;
- include measures to minimise the risk of erosion and sediment transport;
- include measures to minimise the risk weed introductions/transfers (including machinery and vehicle washdown and management of any imported soil);
- include measures to rehabilitate area of temporary disturbance, including replacement of removed vegetation; and
- identify responsible persons, monitoring and maintenance measures.

**The approved Construction Environmental Management Plan forms part of this permit and must be complied with.**

*Advice: Once the Construction Environmental Management Plan has been approved the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement).*

**Reason for Condition**

To minimise the potential for impacts to vegetation and watercourses from the construction works

**The hazard management areas shown on the bushfire hazard management plan by Geo-Environmental Solutions dated June 2018 (MRH10690v3) are not approved and must not be implemented.**

**Reason for Condition**

To clarify the scope of the permit

**The public road and fire-fighting water supply system must be designed and constructed in accordance with prescriptions of the bushfire report and bushfire hazard management system by Geo-Environmental Solutions dated June 2018 (MRH10690v3).**

Reason for condition

To reduce the risk to life and property, and the cost to the community, caused by bushfires

**Prior to sealing of the Plan of Subdivision, certification from a suitably qualified person must be submitted to the Planning Authority confirming that the public road and fire-fighting water supply system have been designed and constructed in accordance with prescriptions of the bushfire report and bushfire hazard management system by Geo-Environmental Solutions dated June 2018 (MRH10690v3).**

Reason for condition

To reduce the risk to life and property, and the cost to the community, caused by bushfires

**No vegetation clearing or disturbance may occur other than the minimum necessary to facilitate the essential subdivision works (i.e. construction of road, driveways and provisions of services).**

Reason for Condition

To clarify the scope of the permit

**An approved Weed Management Plan (WMP) for Lots 1 to 9, 101 and the public open space lot, must be implemented.**

**A WMP must be submitted and approved prior to the commencement of works.**

**The WMP must:**

- identify and illustrate the woody environmental weeds on the site;
- set out an environmentally-appropriate methodology and program for eradicating these weeds (including appropriate disposal) based on defined management zones (noting that eradication of many species will require follow-up treatments for several years, however weed management prescriptions for the public open space lot must be limited to primary works only);
- include a concise action table that provides clear and detailed actions, the area to be targeted, the timing of each action and the persons/parties responsible for undertaking all actions;
- include requirements to notify the Planning Authority in writing of progress in implementation of the plan;
- include a simple map of the property that defines the management zones for specific actions;
- include prescriptions to minimise impacts on native vegetation and minimise soil disturbance; and
- include a prohibition on the planting of potentially invasive species listed in

**Council's Restricted Plant List;**

- specify that no soil is to be imported onto the site unless it is certified weed propagule free in accordance with Australian Standard AS4419 Soils for Landscaping and Garden Use; and
- be clear and concise so that follow-up treatments can be easily implemented by future landowners (however the bulk of primary weed control works must be scheduled to occur as part of the subdivision works).

*Advice: Once the weed management plan has been approved the Council will issue a condition endorsement (see general advice on how to obtain condition endorsement).*

**Reason for condition**

To ensure the development does not contribute to the spread of weeds and to offset the biodiversity impacts associated with the development.

**A Part 5 Agreement pursuant to section 71 of the Land Use Planning and Approvals Act 1993 must be registered on the new Titles for lots 1 to 9 at the time of issue.**

**The Agreement must specify that, unless the written consent of the Planning Authority is obtained:**

- the approved Weed Management Plan must be implemented and complied with;
- no removal of native vegetation may occur;
- all development must be generally in accordance with the WWF-Australia publication Minimising The Swift Parrot Collision Threat: Guidelines and recommendations for parrot-safe building design (2008); and
- the owner(s) (Owner A) must allow the owner(s) (Owner B) of an adjacent lot to establish and maintain a bushfire hazard management area on the land owned by Owner A, in accordance with a bushfire hazard management plan based on BAL-19 or lesser separation distances certified by an accredited bushfire hazard practitioner, and approved as part of a permit granted under the Building Act 2016, at any time the land owned by Owner A that is within the hazard management area under the approved bushfire hazard management plan of Owner B is not in accordance with the prescriptions for the hazard management area as specified in the approved bushfire hazard management plan.

**The Council will have its solicitors prepare the Agreement for signing by property owner(s). The Council will then lodge the Agreement with the Lands Titles Office. The cost of preparing the Agreement and registration with the Land Titles Office is to be met by the applicant. Please contact the Development Appraisal Planner to initiate preparation of the Agreement.**

**Reason for condition**

To ensure future development on the lots can achieve an acceptable level of bushfire risk

**Recommended Advice:**

*This property possesses conservation values which may be of national environmental significance (habitat for the endangered Swift Parrot). The proposed development includes activities that may adversely impact on these values (removal of Eucalyptus globulus and Eucalyptus ovata trees), and therefore may be subject to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. It is therefore recommended that the applicant refer the proposal to the Commonwealth Environment Minister for determination*

*as to whether the development requires approval under the Environment Protection and Biodiversity Conservation Act 1999. For more information on how to make a referral visit Environment Australia's Website at <http://www.environment.gov.au/epbc/index.html>*