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Victorian Planning Authority
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EastofAberline@vpa.vic.gov.au

20 October 2025

Dear VPA officers,

RE:

**COMMENTS ON PLANNING STRATEGY – EAST OF ABERLINE, WARRNAMBOOL
(draft Amendment C217 of the Warrnambool Planning Scheme and accompanying documents)**

Thank you for the opportunity to comment on this proposal to subdivide and develop land.

I grew up in Warrnambool and was awarded a Tozer Memorial Scholarship in 1977. I used the prize to purchase two plant books which I still have on my shelves. I have watched Tozer Memorial Reserve since then and have been surprised and delighted to see the land recover after the removal of the pines.

Decades later my love of, and connection to, plants and nature continues. I have worked as an ecologist for over 45 years focussed on survey, protection, and restoration of natural systems, particularly in south-west Victoria. I also teach Conservation and Ecosystem Management and regularly visit Tozer Memorial Reserve with students to show them how land can be restored when it is given the care, time, and space it needs.

I am therefore deeply concerned that Tozer Memorial Reserve and the living things for which it is home are conserved and protected from encroaching development. Areas for conservation are vulnerable to a wide range of disturbances and require active protection and management, particularly in urban areas. The proposal for an additional 4,247 houses, and 11,891 people (and associated infrastructure), immediately adjacent to the Reserve is deeply concerning. This level of development is a substantial and ongoing threat to the values of Tozer Reserve, during development, construction, and ongoing use of the land.

The planning processes to date have multiple stories which are incompatible. One part of the story is making statements about the conservation significance of Tozer Reserve. Other parts are failing to recognise that significance. Of great concern is that the *Community Infrastructure Needs Assessment* (2025) incorrectly includes Tozer Reserve as public open space. This misleading inclusion then flows through to a completely inadequate allocation of public open space within the subdivision itself. This is deeply concerning.

I appreciate the need for Warrnambool to have more affordable and liveable housing, particularly for younger people, older people, and single people.

While we need more affordable housing, we also need to respond to the concurrent and increasing pressures of climate change and biodiversity collapse. These two pressures threaten to make human lives increasingly difficult.

Victoria's Climate Change Report (2024) summarises:

- Victoria's climate has continued to warm since the 19th century, becoming drier in recent decades and experiencing more frequent and intense climate hazards.
- Victoria will experience a warmer future climate with further increases to average temperatures and more frequent and intense hot days.
- Victoria is likely to continue to become drier, especially in winter and throughout the cool season (April – October), while the intensity of short duration extreme rainfall events is projected to increase.
- High-impact climate hazards that affect Victoria, including floods, heatwaves, drought, bushfires and sea-level rise, are also changing and are projected to exacerbate under a warming climate ([Victoria's changing climate](#)).

A new resident could reasonably expect the house and land they purchase to provide a safe and liveable home for them and future generations.

Climate in the future will be radically different to the climate of the past. The current predictions for climate change require a transformation in how we approach planning, development, and housing to allow people to live in a healthy and safe environment. The figures (right) from [Victoria's changing climate](#), show the challenges we face.

'Business as usual' with extensive paving and conventional planning methods will not be viable.

As well as climate change, we are facing imminent biodiversity collapse.

The United Nations reports:

"The overwhelming evidence of the IPBES Global Assessment, from a wide range of different fields of knowledge, presents an ominous picture," said IPBES Chair, Sir Robert Watson. "The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.

"The Report also tells us that it is not too late to make a difference, but only if we start now at every level from local to global," he said. "Through 'transformative change', nature can still be conserved, restored and used sustainably – this is also key to meeting most other global goals. By

High emissions scenario

Projections compared to 1986–2005 baseline*

Average temperature will increase by:

- 1.5 °C (1.1–1.9 °C) by 2050
- 3.1 °C (2.2–3.6 °C) by 2090

Hot days of the year hotter by:

- around 2 °C by 2050
- around 4 °C by 2090

Average number of heatwave days per year:

- around 40 days by 2050
- around 60 days by 2090

Larger decline in cool season rainfall
Increasingly intense extreme rainfall

Increase in average number of dry months:

- around 60% by 2050
- around 100% by 2090

transformative change, we mean a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.”

“Negative trends in nature will continue to 2050 and beyond in all of the policy scenarios explored in the Report, except those that include transformative change – due to the projected impacts of increasing land-use change, exploitation of organisms and climate change...” ([UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating' - United Nations Sustainable Development](#)).

The main driver of biodiversity loss remains humans’ use of land.

The East of Aberline development proposal therefore offers an opportunity to undertake transformative change, and to create a liveable housing area which gives people the opportunity to contribute to reducing climate change and preventing biodiversity loss, for their own benefit.

The draft East of Aberline proposal includes aspirations towards this kind of transformation, but unfortunately the details and implementation required are inadequate and incomplete.

In particular, Tozer Memorial Reserve is an important remnant of nature in a broadly cleared landscape. Its long-term conservation and enhancement are immeasurably important.

The following comments include information about the land which is not adequately considered in the planning and background documentation. I also offer comments on the proposed Precinct Structure Plan documentation. The documents would benefit greatly from considering information from the local people who love and appreciate this land and have a deep connection to it.

I urge the Victorian Planning Authority, Warrnambool City Council, and the developers to embrace the opportunity to do better with this place, and to create a legacy of real change for the future residents, both human and other-than-human.

Please contact me if you would like to clarify anything or require further information.

Yours faithfully,

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BAppSci, MSc, GradDipEd, MTAP,

COMMENTS ON PLANNING STRATEGY – EAST OF ABERLINE, WARRNAMBOOL

(draft Amendment C217 of the Warrnambool Planning Scheme and accompanying documents)

██████ BAppSci, MSc, GradDipEd, MTAP

VISION:

East of Aberline is place where humans and nature live side by side. Children grow up in a neighbourhood with plenty of plants and green space and can look at bugs and grow their own food. People of all ages have outdoor places where they can interact and meet their neighbours, developing strong bonds of care and support.

Tozer Reserve. Russells Creek, and the Water Reserve are respected and cared for as important natural places where plants and animals have a safe place to live without being disturbed. Smaller oases of nature are scattered through the development.

The streets are shady and a safe place for children to ride bikes and walk to school or their friends' houses. There are places for children to play outdoors without disturbing the conservation areas.

When floods happen, people's homes are not threatened, and their access routes are still safe. If bushfire approaches, people can safely leave the area. On the hottest days, residents are grateful for the areas of water and green space that keep their surrounds comfortable for people and animals.

Images: Native wildflowers and grassland, Woorndoo area, December. Similar grassland species grow in Tozer Reserve and are appropriate for conservation buffers.



EXPANDED ECOLOGICAL CONTEXT

LACK OF INDIGENOUS VEGETATION IN DISTRICT

The ecological information provided in the supporting documents is incomplete, inaccurate, and in places misleading. Warrnambool and district has been extensively cleared of native vegetation. There are very few public conservation reserves, and these are relatively small.

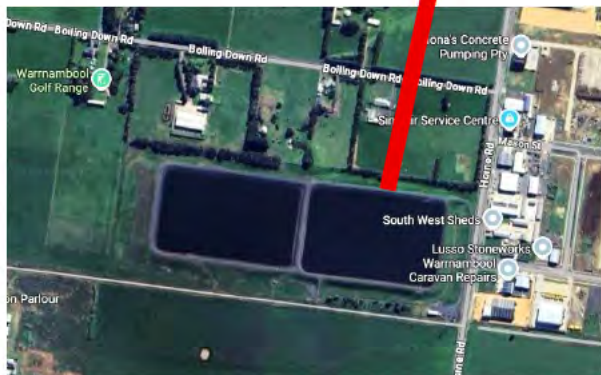
The modelled EVC mapping (Naturekit, *image right*) of the area suggests that there are scattered areas of native vegetation, but this is rarely the case. Most of the modelled patches are plantations of introduced species, particularly cypresses and non-indigenous eucalypts. These have multiple values for wildlife (e.g. roosting, nesting, food, shelter), but in no way conserve the breadth of flora and fauna which once inhabited the district.



Looking more closely at the proposed development site, the errors in the EVC mapping are more obvious (*images over the page*).

- Only small parts of Tozer Reserve mapped as Plains Grassy Woodland – much of the Reserve is native vegetation which is Plains Grassy Woodland or a recovering form of it
- Trees on north side of Wangoom Rd mapped as Plains Grassy Woodland – actually cypress plantations
- Large square area to south of area mapped as Plains Grassy Woodland – actually water retention basin.

In my knowledge of the district, the largest areas of Plains Grassy Woodland or plains grassland (or similar derived vegetation communities) are unreserved roadsides and unused rail reserves around Woolsthorpe and Mortlake Common. There are a few patches of native grassland on roadsides around Ellerslie, but these do not support the high diversity of plants recorded at Tozer Reserve.



A publication by Australian Plant Society, [Nature Reserves of Warrnambool and District.pdf](#), shows the lack of areas where the public can appreciate diverse native plants (*image right*). This also means that native animals have few places which support their needs.

This lack of native vegetation is closely tied to the lack of reserved Crown land for conservation (*image below*). The reserved areas in Warrnambool are predominantly sporting fields, with some areas on the coast which have relatively low diversity due to previous land-clearing and the harsh coastal environment.

The Crown Reserves along the rivers are generally grazed and have relatively low conservation values.



RECOMMENDATIONS:

1. The high conservation value of the vegetation of Tozer Reserve for the district be recognised
2. Protection, conservation, and enhancement of Tozer Reserve be a priority action throughout planning for East of Aberline.

UNDERLYING LAND CHARACTERISTICS

This lack of native vegetation was, of course, not always the case. Early surveyors' maps show the area around what is now Tozer Reserve was well-vegetated and diverse, with many areas of wetlands (see Appendix 1 for more details).

A Survey of the Parish of Wangoom in 1854, ([FEATR579WANGOOM PROV Map Warper: Viewing Map 6092](#), [Image right](#)) included the proposed development area.

Russell's Creek is shown as a much more substantial waterway, equivalent to the Merri River where it joins, and fed by 'open flats' (wetlands).

There is another 'Gum and Low Scrubby Flat' (wetland) in the northern part of the development area with a drainage line clearly running from it into Russells Creek.

Another drainage line is shown in the south-western corner of the development area.

Recommendation:

3. These underlying variations in soils and natural drainage should be respected and attended to in the development proposal.



WATER RESERVE, 43 BOILING DOWN ROAD WARRNAMBOOL 3280

There is a 1.92 ha area of Crown land at 43 Boiling Down Rd which includes a water body ([Historical Photo-Maps Image right](#)). Aerial photographs show a waterbody which is unfenced and being treated like part of the farmers paddock. It is currently zoned FZ (farming zone [Planning property report](#)).

Water Reserves were generally created in places where there was permanent water away from rivers or creeks. They are often springs, or blind catchments which provide a reliable source of water. This was important when travelling stock needed access to water without crossing freehold land.

The fact that this waterbody contains water without any obvious inputs indicates it is probably spring fed.

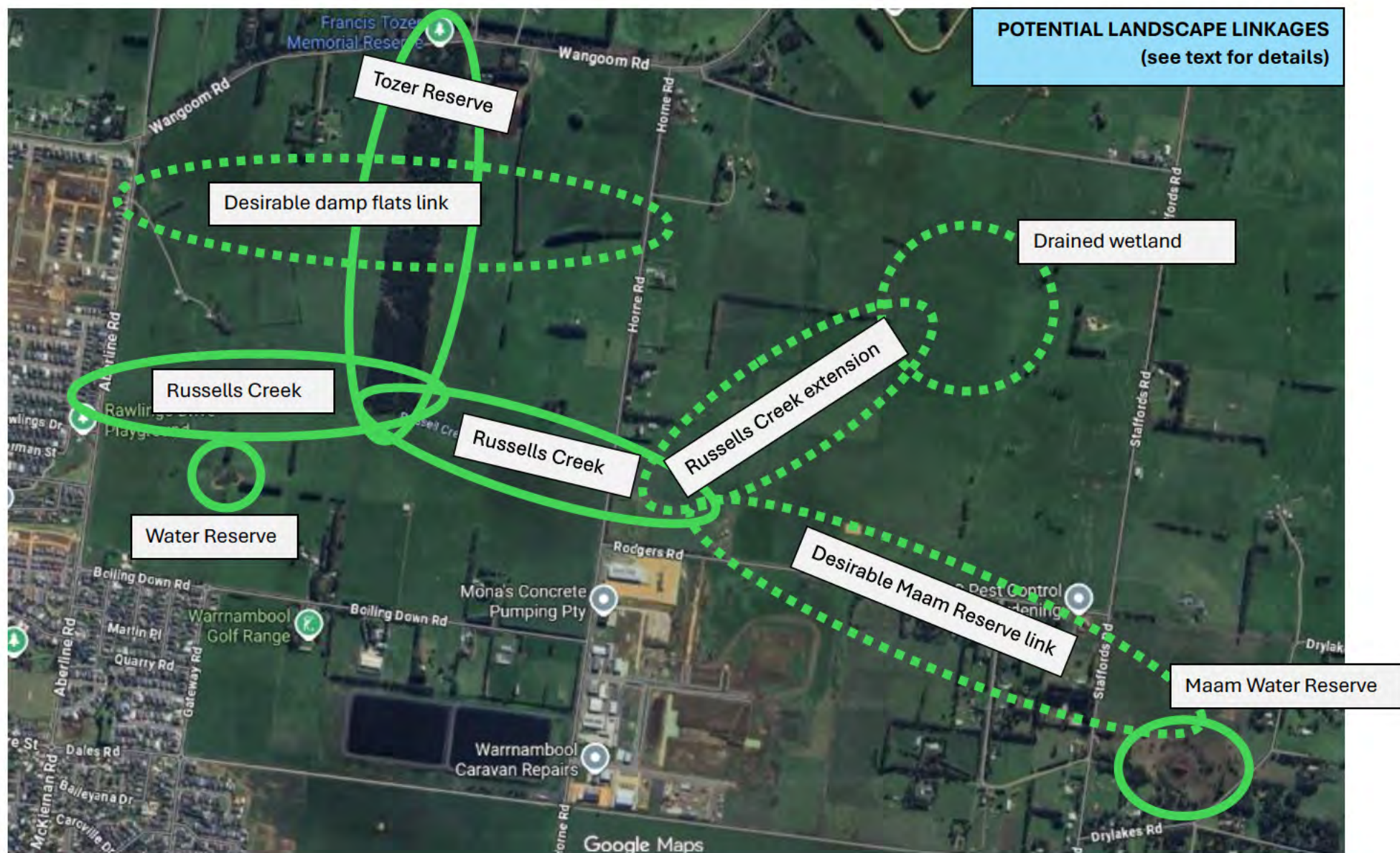
Historic photos (Appendix 3) show water persisted in this area during the Millenium drought when many other waterbodies dried up.

The photo taken on 12/7/2013 (*lower image*) shows cultivation avoided the wet area that extends beyond the main water body.



Recommendations:

- 4. The waterbody of the Water Reserve at 43 Boiling Down Rd, and a suitable buffer, be managed for conservation**
- 5. Buffers and drainage lines be surveyed**
- 6. Buffers and drainage lines be managed for conservation including revegetation with appropriate indigenous species**
- 7. Vegetated connections to Russells Creek be included within the subdivision to support the movement of wildlife (see image over the page)**



POTENTIAL LANDSCAPE LINKAGES

THE PSP proposes Tozer Reserve and Russells Creek as the main conservation linkages. This is very minimal, and doesn't recognise the natural water presence and water movement of the land.

RECOMMENDATION:

8. Additional linkages should be considered:

- Linking 143 Boiling Down Rd Water Reserve to Russells Creek (as per previous)
- Focus on natural open space areas across the currently drained flats (at right angles to Tozer Reserve). These damp flats may have spring water inputs, or may collect overland flow. Either way they need to be considered in planning for the landform.
- Maam Reserve – This is an extremely high value conservation area currently identified as a Water Reserve. Wherever possible, opportunities should be taken to provide islands or links of native vegetation and wet areas between the Maam and Russells Creek.
- Drained wetland – to the east of the development area, a drained wetland feeds water into the headwaters of Russells Creek. Wherever possible, water should be restored to this wetland, and opportunities should be taken to provide islands or links of native vegetation and wet areas between this wetland and Russells Creek.
- Headwaters of Russells Creek – Historical maps indicate the Creek was once a much more substantial waterway. Wherever possible, opportunities should be taken protect and revegetate the headwaters of the Creek maintain connection to the lower part of Russells Creek.

BUFFERS FOR TOZER RESERVE

The current proposal does not include buffers to protect the values of Tozer Reserve. Instead, roads are placed adjacent to the Reserve which is completely inappropriate for a high value conservation area.

The conservation values of Tozer Reserve have persisted and regenerated while surrounded by open farmland. This is relatively benign compared to 11,931 people and their cars, dogs, and cats. The long-term survival of the values of Tozer Reserve will require careful maintenance and management. It would be a tragedy if the proposed subdivision was allowed to degrade one of the highest value areas for conservation within Warrnambool City.

Degradation can occur at several stages:

- Infrastructure development – developer creates access roads, installs services etc.
- Subdivision of blocks – developer reshapes land to form individual blocks of subdivision
- Construction of houses – individual builders construct buildings and landscape blocks
- Use of houses – individual landholders live their lives in their new environment

The following considers risk management for Tozer Reserve conservation values:

Aspect of proposed subdivision	Relevant Tozer Reserve conservation values	Risk to Tozer Reserve conservation values	Suggested controls
Changes to drainage and surface flows	Tozer Reserve includes several damp areas with specialist plants. The whole area relies on runoff and groundwater for adequate water to maintain indigenous vegetation and fauna, as well as fungi and non-vascular flora. Birds require access to drinking water every day.	Changing drainage and surface flows will change the water supply to the living beings of Tozer Reserve. The current proposals (described in PSP table) would tend to dry out the Reserve. Drying out the Reserve will lead to a change in vegetation which may include: • Loss of indigenous species that rely on current water regime including frogs • Invasion of weeds species which can tolerate drier conditions • Increase fire risk of vegetation	• Keep drainage works away from Tozer Reserve • Ensure water movement in and out of the Reserve is not altered by the proposed development during construction, or ongoing occupation • Monitor water conditions in the Reserve under drought conditions and climate change, and if considered appropriate, redirect clean stormwater to supplement the Reserve environment
Clearing of land during development	All	Extensive clearing of land is likely to: • Change surface water movement • Dry out the land (higher evaporation) • Create dust which blankets vegetation affecting plant health and use by animals • Loss of paddock and windbreak trees • Wildlife using paddock/windbreak trees rely on Tozer Reserve more • Loss of paddock water resources (e.g. stock troughs) • Change in wildlife behaviour and movement – wildlife can no longer access resources of subdivision area, placing more pressure on Tozer Reserve	• Stage development of the land to reduce the area which is bare at any time. • Recover land with appropriate vegetation or mulch as quickly as possible. • Plan, so that revegetation can occur in a season when rapid growth is more likely • Use other measures to reduce dust (e.g. water sprays, covering stockpiles) • Plan and implement for new vegetation as early as possible in the development and protect these from development activities.

Aspect of proposed subdivision	Relevant Tozer Reserve conservation values	Risk to Tozer Reserve conservation values	Suggested controls
			• Include wildlife water resources in planning and implementation of subdivision • Monitor wildlife
Construction activity of roads and services	All	• Noise from machinery including sudden loud noises (e.g. dropping load of rocks) disturbs wildlife. Wildlife may not occupy parts of Tozer Reserve to avoid noise. • Increased traffic (change in wildlife activity or collisions) • Bare soil	• Maintain an adequate buffer between Reserve and construction activity • Keep main access roads and stockpiles away from Reserve • Dust as above
Construction of individual houses	All	• Noise from machinery including sudden loud noises (e.g. dropping load of rocks, nail guns, backing beeps) disturbs wildlife. Wildlife may not occupy parts of Tozer Reserve to avoid noise. • Rubbish and litter • Increased traffic (change in wildlife activity or collisions) • Bare soil	• Maintain an adequate buffer between Reserve and construction activity • Keep main access roads and stockpiles away from Reserve • Dust as above
Increased population living adjacent to Reserve using subdivision	All	• People seeking natural spaces for walking and recreation (including kids) • Dogs and cats in yards • Dogs and cats roaming • Dogs barking incessantly disturbing wildlife (night and day) • Dogs and cats being walked – on lead and off lead • Mowing and domestic machinery (leaf blowers, power tools) • Rubbish dumping (lawn clippings, prunings)	• Reservation status recognises conservation value rather than recreational values • Restrict access points to the Reserve using fencing and identified pathway/entrance • Maintain a vegetated buffer to discourage unmanaged access to the Reserve

Aspect of proposed subdivision	Relevant Tozer Reserve conservation values	Risk to Tozer Reserve conservation values	Suggested controls
		• Unauthorised mowing and vegetation damage in the Reserve • Perception of the Reserve as a risk (e.g. fire, snakes) and additional pressure to manage vegetation to 'parkland' standards rather than conservation values. • Use of pesticides, herbicides, fertilisers etc.	• Provide adequate natural spaces elsewhere in the subdivision to reduce pressure on the Reserve • Incorporate information about the Reserve in the process of selling blocks and housing to prospective residents • Ongoing events and communications to educate community about the Reserve and conservation within the subdivision • Monitoring of condition of Reserve • Penalties for infringements (e.g. rubbish dumping, vegetation damage) • Regulations for cats and dogs to be contained (e.g. cat enclosures) or on leash at all times within the subdivision • Avoid having housing types with 'dog yards' close to the Reserve.
Ongoing use of road network, particularly adjacent to Reserve	Wildlife, vegetation integrity	• Collisions with wildlife (e.g. wildlife injury or death, car damage) • Change in wildlife behaviour and movement	• Keep roads away from Reserve boundary • Have wide buffer of low vegetation between Reserve and road • Locate major roads away from the Reserve • Locate major intersections away from the Reserve
Street and house lighting	Wildlife activity and cycles, vegetation integrity and cycles	Street lighting can disrupt the activity and cycles of a wide range of native flora and fauna, reducing their resilience and survival.	• Follow Guidelines for lighting for wildlife: National Light Pollution Guidelines for Wildlife

RECOMMENDATION:

9. Reservation status recognises conservation value rather than recreational values
10. Restrict access points to the Reserve using fencing and identified pathway/entrance
11. Drainage, roads and intersections, and other infrastructure be kept away from Tozer Reserve
12. A 100m buffer of low wildflower and native grassland vegetation be established either side of Tozer Reserve (see diagram) to provide effective protection of the Reserve from a range of disturbances
13. Lighting be directed away from the Reserve and follow the recommendations for Wildlife Friendly lighting throughout the proposed subdivision: National Light Pollution Guidelines for Wildlife
14. Provide adequate natural spaces elsewhere in the subdivision to reduce pressure on the Reserve
15. Incorporate information about the Reserve in the process of selling blocks and housing to prospective residents
16. Ongoing events and communications to educate community about the Reserve and conservation within the subdivision
17. Monitoring of condition of Reserve, including vegetation and wildlife
18. Penalties for infringements (e.g. rubbish dumping, vegetation damage)
19. Regulations for cats and dogs to be contained (e.g. cat enclosures) or on leash at all times within the subdivision
20. Avoid having housing types with 'dog yards' close to the Reserve.
21. Ensure water movement in and out of the Reserve is not altered by the proposed development during construction, or ongoing occupation
22. Monitor water conditions in the Reserve under drought conditions and climate change, and if considered appropriate, redirect clean stormwater to supplement the Reserve environment
23. Stage development of the land to reduce the area which is bare at any time.
24. Recover development land with appropriate vegetation or mulch as quickly as possible.
25. Plan, so that revegetation can occur in a season when rapid growth is more likely
26. Use other measures to reduce dust (e.g. water sprays, covering stockpiles)
27. Plan and implement for new vegetation as early as possible in the development and protect these from development activities.
28. Include wildlife water resources in planning and implementation of subdivision
29. Monitor wildlife
30. Use fencing compliant with [nature-fencing-requirements.pdf](#) or other contemporary and well-researched recommendations.

There are also numerous suggestions in the following tables of the submission.

Suggested buffers for Tozer Reserve and the Water Reserve, and biological link (bright green). A similar 100m buffer should be placed either side of Russells Creek but it is too difficult to draw.



Recommended buffer widths from Hansen et al.

Landscape context / Management Objective	Land Use Intensity High
Improve water quality	60
Moderate stream temperatures	95
Provide food and resources	95
Improve in-stream biodiversity	100
Improve terrestrial biodiversity	200

Comments on **East of Aberline PSP - Existing Ecological Conditions (Ecology & Heritage) August 2025**

Statement in Ecological report	Response	Suggested improvements
2.1 Desktop Assessment	Very limited sources used for desktop assessment	See section in these comments on Ecological Context.
2.3 Field Assessments 2.3.1 Ecological Assessments (including Habitat Hectares) Detailed ecological assessments were undertaken by a habitat hectare assessor accredited by DEECA in the habitat hectare assessment methodology between 20th – 22nd of May 2024	May is a very poor time to observe plants. Particularly since this was during a period of drought when many plants were dormant. This is acknowledged in the General Limitations: “The field assessment was undertaken during a sub-optimal season for the identification of flora and fauna species (i.e. late autumn). The ‘snapshot’ nature of the assessment means that migratory, transitory or uncommon fauna species may be absent from typically occupied habitats at the time of the field assessment. In addition, annual or cryptic flora species such as those that persist via underground tubers may also be absent.@	- Draw on the knowledge of local people who have observed the Reserve over many years. - Repeat surveys, particularly Habitat Hectares, during spring.
The fieldwork did not include targeted surveys for significant species.	Listed migratory species - River flats and wetlands are habitat for Latham’s Snipe (<i>Gallinago hardwickii</i>). Most of the land being privately owned, incidental sightings are likely to be very low. - Surveys were undertaken in May. Latham’s Snipe are in the northern hemisphere at this time of year. - There is a highly significant Latham’s Snipe location just outside the study area, at Carroll’s Rd, Allansford. Over	- Draw on the knowledge of local people who have observed the Reserve over many years. - Repeat surveys during spring. - Expand context and surveys to include locally significant areas including Maam Reserve.

Statement in Ecological report	Response	Suggested improvements
	200 birds have been recorded there (18 is nationally significant). Maam Reserve - This important wetland and conservation area is not mentioned in the report. Russell's Creek - No detailed assessment of the Creek or riparian zone mentioned in the report. Aquatic Habitat Murray Spiny Crayfish <i>Euastacus armatus</i> (Threatened under the FFG Act) - Although this is a threatened species, it is out of range (north of the Great Divide) and can be considered non-native here. It is also potentially a threat to local freshwater crayfish. Glenelg Spiny Crayfish <i>Euastacus bispinosus</i> (Threatened under the FFG Act and EPBC Act) - Present in Merri River, potentially present in Russell's Creek	
2.5.1 General Limitations General ecological limitations associated with the ecological investigations are detailed below...		- Draw on the knowledge of local people who have observed the Reserve over many years. - Repeat surveys, particularly Habitat Hectares, during spring.

Statement in Ecological report	Response	Suggested improvements
p.47 Grassy Eucalypt Woodland of the Victorian Volcanic Plain While it was deemed to be present in the vegetation assessment undertaken by Landtech Consulting (Landtech Consulting 2014b), vegetation within the study area did not meet the condition ... (A list of typical ground layer species is at Appendix A.)	• Low diversity of native flora – INCORRECT – Surveys were conducted in May when many indigenous species are difficult to detect. • Absence of remnant eucalyptus species –The entire district has been cleared of remnant eucalypts. • Low coverage of characteristic native grasses (e.g. Spear grass) – INCORRECT – Surveys were conducted in May when many indigenous species are difficult to detect. • High cover of exotic vegetation – INCORRECT – Surveys were conducted in May when many species are difficult to detect. • Majority of the vegetation present is revegetation within tozers reserve – INCORRECT – much of the vegetation is natural regeneration which has occurred since the pines were removed. Revegetation is restricted to some woody species.	• Assessment should consider the highly degraded and cleared nature of the district. • Within this context, Tozer Reserve is a very high value area for conservation. Values include: • Inherent values for flora and fauna • Potential for further natural regeneration • Potential source of propagation material for revegetation. Many species found in Tozer Reserve are not recorded elsewhere in the surrounding district.
While the tree canopy layer may be absent in derived representations of the community, the absence of clear evidence of prior presence in combination with an understorey which is not dominated	• There is clear evidence of prior presence provided by historical maps (see Appendix 1). • Surveys in May are unlikely to show the extent of native grasses. During summer I have observed extensive areas of native grassland including	• Historical evidence and observations by local people indicate that the characteristics of Nationally-listed Grassy Eucalypt Woodland of the Victorian Volcanic Plain is likely to occur. • Draw on the knowledge of local people who have observed the Reserve over many years. • Repeat surveys, particularly Habitat Hectares, during spring.

Statement in Ecological report	Response	Suggested improvements	
by any of the characteristic native grass genera indicates the patch of Plains Grassy Woodland does not qualify as the Nationally-listed Grassy Eucalypt Woodland of the Victorian Volcanic Plain.	<i>Austrostipa</i> spp., <i>Poa</i> spp. and <i>Austrodanthonia</i> spp. Native Tussock Grass (<i>Poa</i> spp.) grassland area photographed 6/1/2023 in Tozer Reserve. 	Native Wallaby Grass (<i>Rytidosperma</i> spp.) grassland area photographed 6/1/2023 in Tozer Reserve.	

Statement in Ecological report	Response	Suggested improvements
It should also be noted that although the community's distribution map is only indicative, the Tozers Reserve and contained Plains Grassy Woodland is located within the outer extremity of the Distribution area (DEWHA 2009).	The distribution of the EVC is related to geology. The VVP is determined by previous volcanic activity.	The margins of an EVC distribution are just as valuable as other areas of the distribution.
p.48 Natural Temperate Grassland of the Victorian Volcanic Plain In Victoria, this ecological community is linked to EVC 132 Plains Grassland ... No vegetation was assessed as Natural Temperate Grassland of the Victorian Volcanic Plain due to the paucity of native grass throughout the study area; no Plains Grassland or Creekline Tussock Grassland vegetation was present anywhere in the study area, and there were no patches of native grasses between the treed areas in Tozers Reserve that could have constituted the	Not agreed, as above	As above

Statement in Ecological report	Response	Suggested improvements
ecological community (i.e. there were no gaps between trees that were greater than 0.5 hectares that also supported a patch of native grassland 0.05 hectares (or greater) in size). The vegetation therefore did not meet the key diagnostic characteristics for this ecological community. *Nearby bioregions can be applicable in some situations, where the key diagnostic characteristics and conditions thresholds are met.		 Native Wallaby Grass (<i>Rytidosperma</i> spp.) grassland area photographed 6/1/2023 in Tozer Reserve.
p.49 Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains The Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains ecological community represents	The assessment only considers areas within Tozer Reserve. Historical maps indicate this vegetation community is likely to have been present in several areas, including within the proposed development area (see Appendix 1). Restoration of water to, and exclusion of grazing from, wetland areas, can result in excellent regeneration of wetland vegetation communities.	As wetland areas are recognised, regenerated, and restored, be open to which plant communities may emerge.

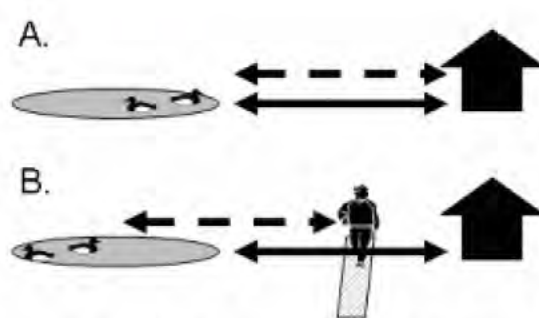
Statement in Ecological report	Response	Suggested improvements
temporary freshwater wetlands that are inundated on a seasonal basis. It comprises an herbaceous ground layer with forbs present, often with a considerable graminoid component. Trees and shrubs are sparse to absent. ... Within Tozers Reserve, these depressions were significantly less than 0.1 hectares (i.e. the required size for a wetland within a native vegetation remnant), and there was not sufficient formation of depressions to consider a fine scale cluster of wetlands (i.e. gilgai) that would amount to 0.5 hectares within a five hectare area. There was also no isolated wetland that was a minimum of 0.5 hectares in size. As such, the options within Figure 1 of the Listing Advice for the ecological community could not be met, in addition to the Biota component. Accordingly,	The spring fed wetland in the 43 Boiling Down Rd Water Reserve is spring fed and surrounded by low lying areas which are seasonally wet. The area of the main wetland is approximately 0.33 ha with a surrounding damp area of approximately 0.38 ha. The large wetland area in the headwaters of Russells Creek (beyond the proposed development area) also needs to be considered. Blacks Swamp to the north of the proposed development area is also currently drained.	

Statement in Ecological report	Response	Suggested improvements
the ecological community was assessed to not be present.		
p.49-50 3.2.4 State-significant Ecological communities (listed under the FFG Act) No FFG Act-listed ecological communities were present within the study area, as determined by an assessment against the descriptions and characteristics described for these communities (DELWP 2019). Western Basalt Plains (River Red Gum) Grassy Woodland The vegetation present within Tozers Reserve and elsewhere in the study area did not meet the description for Western Basalt Plains (River Red Gum) Grassy Woodland (DELWP 2019) as it lacked an open canopy of River Red Gum, which is a defining characteristic of this ecological community.	As above for EPBC listed communities	As above for EPBC listed communities

Statement in Ecological report	Response	Suggested improvements
Western (Basalt) Plains Grasslands Community The vegetation present within Tozers Reserve and elsewhere in the study area did not meet the description for Western (Basalt) Plains Grasslands Community (DELWP 2019) as there were no areas where perennial native plants characteristic of grassland vegetation predominated, in addition to where very few eucalypts and shrubs were present and generally confined to drainage lines and the margins of ephemeral wetlands.		
6.1 Specific Mitigation Measures Retain all vegetation within the Tozers Reserve as a conservation area, as this offers both the highest quality and largest area of native vegetation within the study area, and has clear potential to form part of a biolink connecting to	Supported	• Supported • Ensure the Planning Scheme is amended to protect the area as a Conservation Area, not PPRZ.

Statement in Ecological report	Response	Suggested improvements
Russells Creek and downstream to the Merri River, as discussed below;		
Tozers Reserve should be buffered from surrounding development via substantial vegetated corridors, at least 20 metres in width.	The Reserve should be buffered from surrounding development, but the buffers need to be much wider than 20m.	• Buffers of at least 100m are recommended consistent with a large review of conservation buffers: Department of Sustainability and Environment April 2010 Birgita Hansen, Paul Reich, P. Sam Lake, Tim Cavagnaro School of Biological Sciences, Monash University • Microsoft Word - Riparian_Report.doc • There is an extensive discussion of buffers and what they need to protect against elsewhere in this submission.
Any public access areas or facilities should consider potential impacts on significant flora and fauna in the area and be sensitively designed to mitigate any adverse effects to the ecology, hydrology and aesthetic of the area.	Supported.	• Recreation areas should not be adjacent to Tozer Reserve • Drainage, lighting, and roading should be designed to protect the values of Tozer Reserve. • More detail provided elsewhere in submission.
Aside from designated access points for management purposes or future pathways, the reserve should be fenced off to prevent unauthorised vehicle and trail bike access, and internal pathways should be formalised and fenced off in such a manner to deter off-track passive or	Supported	• Refer to recommendations for wildlife fencing elsewhere in this submission.

Statement in Ecological report	Response	Suggested improvements
active recreation. Any fencing should not prevent wildlife from accessing the reserve;		
Only mention of climate change p. 68 Design of the open space network should consider potential issues associated with climate change, including the requirement to build resilience by increasing connectivity, changes to the abundance and distribution of invasive species and the potential for increased fire events.	Supported. The proposed subdivision design does not adequately address climate change issues.	• Explicitly include design to address climate change issues including: • Improved connectivity of natural areas • Management of invasive species (including garden escapes) • Improved design of buffers for management of fire.
BUFFERS p.59 Apply the five principles of Biodiversity Sensitive Urban Design: Maintain and introduce habitat, Facilitate dispersal, Minimise threats and disturbances, Facilitate natural ecological processes, Improve potential human nature interactions (Garrard et al. 2018). Suggestions include: o Design areas of open space (informal parks,	Buffers are required, but they need to be much wider. More connections are required. These are woefully absent within the subdivision with natural areas restricted to the 'T' of Tozer Reserve and Russells Creek. The 43 Boiling Down Rd Water Reserve has also not been connected. 5 Buffer-zones-paper-version.pdf (GHCMA) A buffer is an area of land set aside between irrigation developments and retained native vegetation or other important environmental features to ensure water use and management	• See 'Ecological context' for more discussion of buffers and connectivity. • Design and management of buffer areas needs to consider a wide range of issues. The effectiveness of buffers depends on the issue being addressed, the likelihood of the buffer being respected, the size, position, and condition of the buffer, and effective enforcement and maintenance of buffer areas. • Buffer creep. The term 'buffer creep' is used to describe the circumstance whereby the effective separation distance between incompatible activities and a wetland is unintentionally shifted in space, while the physical extent of the area designated as the buffer remains the same <i>Weston, Mike & Antos, Mark & Glover, Hayley. (2009). Birds, buffers and bicycles: A review and case study of wetland buffers. Victorian Naturalist. 126. 79-86. fulliss3.indd</i>

Statement in Ecological report	Response	Suggested improvements								
recreation reserves, landscape and amenity areas, and land encumbered by service infrastructure) to promote the integration of biodiversity features. The establishment of 'pocket parks', which provide limited connectivity and opportunities for fauna movement, should be avoided. o Create a variety of more complete flora and fauna habitats to promote and retain biodiversity through the revegetation and enhancement of linear habitat corridors and including creeks, tributaries, drainage lines, existing native windrows and proposed walking/cycling tracks, to provide landscape connectivity and buffers from development, and link them to larger areas of naturally occurring and constructed habitat (e.g. Tozers Reserve, public	practices do not impact upon biodiversity values. Buffer requirements are determined using a risk-based approach depending on two main factors: • The assessed level of risk a proposed irrigation development is likely to have on native vegetation • The value and condition of the native vegetation or waterway on which the proposed irrigation development is likely to impact. The level of risk above can only be determined by obtaining data specific to the site, so in most instances conservative buffer distances are adopted. Standard buffers are shown in Tables 1. Buffer distances should only be reduced where the applicant can demonstrate that biodiversity values will not be affected. This can be done by providing further evidence (e.g., the development is downslope of vegetation) and may require investigations or mitigating works. <table><tr><th>Environmental asset/value</th><th>Standard buffer</th></tr><tr><td>Land administered under the <i>National Parks Act 1975</i> and significant reserves under the <i>Crown Land (Reserves) Act 1978</i></td><td>Up to 200 metres or as advised by Parks Vic</td></tr><tr><td>Waterways including mapped wetlands</td><td>30 metres (Clause 14.02)</td></tr><tr><td>Any vegetation which meets the definition of native vegetation as per 52.17</td><td>Tree Protection Zone (e.g., 12 x diameter at breast height at 1.3 m) up to 15 m maximum which will be determined by the responsible authority on a case-by-case basis.</td></tr></table>	Environmental asset/value	Standard buffer	Land administered under the <i>National Parks Act 1975</i> and significant reserves under the <i>Crown Land (Reserves) Act 1978</i>	Up to 200 metres or as advised by Parks Vic	Waterways including mapped wetlands	30 metres (Clause 14.02)	Any vegetation which meets the definition of native vegetation as per 52.17	Tree Protection Zone (e.g., 12 x diameter at breast height at 1.3 m) up to 15 m maximum which will be determined by the responsible authority on a case-by-case basis.	 Fig. 1. An illustration of 'buffer creep'. the figure presents two scenarios, a buffer without incompatible activities (A) and a buffer with a recreational path (B). Width of the physical buffer (solid arrows) remains unchanged between scenarios while the effective separation distance between the wetland and incompatible activities (dashed arrow) effectively shifts with the introduction of a recreational path into the buffer. Under scenario B, the buffer has shrunk, but because wildlife response distances probably remain constant, the effective buffer now extends into the wetland. - the presence of recreational opportunities in a buffer does not automatically confer high awareness of significant wetlands (or of other conservation values). <i>Minimum width requirements for riparian zones to protect flowing waters and to conserve biodiversity: a review and recommendations With application to the State of Victoria</i> Report to the Office of Water, Department of Sustainability and Environment April 2010 Birgita Hansen, Paul Reich, P. Sam Lake, Tim Cavagnaro School of Biological Sciences, Monash University Microsoft Word - Riparian_Report.doc - Table: Minimum width recommendations (in metres) for riparian zones in Victoria for some common management objectives under a range of landscape contexts. Each recommended width is accompanied by a level of scientific confidence (green=high, yellow=moderate, red=low), based upon published evidence from Australia and overseas.
Environmental asset/value	Standard buffer									
Land administered under the <i>National Parks Act 1975</i> and significant reserves under the <i>Crown Land (Reserves) Act 1978</i>	Up to 200 metres or as advised by Parks Vic									
Waterways including mapped wetlands	30 metres (Clause 14.02)									
Any vegetation which meets the definition of native vegetation as per 52.17	Tree Protection Zone (e.g., 12 x diameter at breast height at 1.3 m) up to 15 m maximum which will be determined by the responsible authority on a case-by-case basis.									

Statement in Ecological report	Response	Suggested improvements																																				
open space) to offer dispersal opportunities. p.60 • The creation of biolinks provides the opportunity to support biodiversity through: o Increasing connectivity between areas of ecological value that have previously been isolated/fragmented; o Providing habitat for wildlife that can utilise habitat in corridors for dispersal, foraging, breeding or sheltering; and, o Enabling species to disperse to or recolonise areas where the species was not formerly present. • Additional biolinks should be incorporated into the Precinct design. Broad habitat components of biolinks should include: p.61-62 o Ground cover species; o Shrubs; o Canopy trees and hollows; o Logs and litter; o Waterbodies (ephemeral or permanent) such as	Planning requirements for conservation areas (Melbourne) 1. Secure and protect the conservation area 2. Develop a construction environmental management plan 3. Develop a fencing plan 4. Develop a land management plan 5. Salvage and relocation of native vegetation 6. Kangaroo management nature-fencing-requirements.pdf	<table><tr><th>Landscape context / Management Objective</th><th>Land Use Intensity High</th><th>Land Use Intensity Moderate</th><th>Land Use Intensity Low</th><th>Wetland/ lowland floodplain/ off-stream water bodies</th><th>Steep catchments/ cleared hillslopes/ low order streams</th></tr><tr><td>Improve water quality</td><td>60</td><td>45</td><td>30</td><td>120</td><td>40</td></tr><tr><td>Moderate stream temperatures</td><td>95</td><td>65</td><td>35</td><td>40</td><td>35</td></tr><tr><td>Provide food and resources</td><td>95</td><td>65</td><td>35</td><td>40</td><td>35</td></tr><tr><td>Improve in-stream biodiversity</td><td>100</td><td>70</td><td>40</td><td>Variable *</td><td>40</td></tr><tr><td>Improve terrestrial biodiversity</td><td>200</td><td>150</td><td>100</td><td>Variable *</td><td>200</td></tr></table> * Variability in width is related to the lateral extent of hydrological connectivity and thus, any recommendation will be site specific. • The land use intensity affects the required width of buffer. Residential development would be considered a ‘High’ land use intensity. • The suggested buffer of 20 m is therefore substantially too small.	Landscape context / Management Objective	Land Use Intensity High	Land Use Intensity Moderate	Land Use Intensity Low	Wetland/ lowland floodplain/ off-stream water bodies	Steep catchments/ cleared hillslopes/ low order streams	Improve water quality	60	45	30	120	40	Moderate stream temperatures	95	65	35	40	35	Provide food and resources	95	65	35	40	35	Improve in-stream biodiversity	100	70	40	Variable *	40	Improve terrestrial biodiversity	200	150	100	Variable *	200
Landscape context / Management Objective	Land Use Intensity High	Land Use Intensity Moderate	Land Use Intensity Low	Wetland/ lowland floodplain/ off-stream water bodies	Steep catchments/ cleared hillslopes/ low order streams																																	
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Improve in-stream biodiversity	100	70	40	Variable *	40																																	
Improve terrestrial biodiversity	200	150	100	Variable *	200																																	

Statement in Ecological report	Response	Suggested improvements
wetlands, ponds and lakes; o Wet depressions; and, o In-stream aquatic environments (e.g. rivers and creeks) (Practical Ecology 2012). Any creation and/or enhancement of biolinks and conservation reserves in the PSP must balance the requirement for bushfire protection and factor in suitable buffers between vegetation and future development. • Appropriate buffer width should be incorporated into biolinks and conservation areas to enable the provision of a core 'non-disturbance' habitat zone of at least 20 metres to support ecological values, in addition to buffers either side for open space, to increase habitat resilience (to edge effects) and ease maintenance requirements and costs. These buffers should also balance the need to		HIGH dairy (high stocking rates >10 DSE/ha/annum ^{1,2}) irrigated dairy dryland cropping (e.g. canola, wheat) high intensity grazing (high stocking rates - beef, horses, deer, etc.) swine and poultry (CAFO) market gardens (where crops are irrigated) high fertilizer application rates (>15kg P/Ha/yr ³) sealed roads within 30m MODERATE dairy (all other stocking rates ≤ 10 DSE/ha/annum) grazing (medium stocking rates 5-15 DSE/ha/annum) other forms of dryland cropping (e.g. lucerne) where irrigation is not used orchards (including citrus) other production crops including vines hops olives medium-low fertilizer application rates (<15 kg P/Ha/yr) high-medium intensity sheep grazing unsealed roads within 30m LOW grazing (low stocking rates <5 DSE/ha/annum all stock) pasture cropping timber plantations forestry operations pesticide application (e.g. Endosulfan-containing insecticides, glyphosate, organophosphates, etc. ⁴) Sources used for determining stocking rate (DSE – dry sheep equivalents) and fertiliser application thresholds are: ¹ adapted from Jansen and Robertson (2001a) ² adapted from Ridley <i>et al.</i>, (2003) ³ adapted from Johnston <i>et al.</i>, (1993) ⁴ refer to Radcliffe (2002) for more information on pesticide use in Australia • • The general “rule of thumb” should be, the wider the riparian zone on both banks, the greater the likelihood that more objectives will be met and the higher the probability that the riparian zone will not require significant management intervention at a later date.

Statement in Ecological report	Response	Suggested improvements
maintain key view lines and enhance the safety of park users as per the Merri River Landscape Guidelines (WCC 2020) and the PSP 2.0 Guidelines (VPA 2021). Buffer widths should be appropriate to the values that are present and/or have the potential to utilise the habitat, and seek to incorporate a diversity of food resources and fauna microhabitats. For the study area, a minimum non-disturbance habitat zone of 20 metres either side of Tozers Reserve and Russells Creek, in addition to a buffer required to accommodate open space, is recommended. This non disturbance habitat zone would also be sufficient to support common generalist fauna such as those identified in Section 3.1.4. These recommendations may require review dependent		• Buffers of 100 m are recommended for Russells Creek. These buffers need to be substantially clear of any paths or other disturbances which reduce the effectiveness of the buffer for conservation and riparian values. • Given the high density of housing, there will be a strong appetite from people to access natural areas for their own recreational purposes. This type of access is generally not compatible with the primary conservation purpose. • Additional 'peopley' natural areas will also need to be provided. These will provide some conservation values but will be compromised by the presence of people and should be considered as natural recreation areas, not conservation areas or conservation buffers. • It is proposed that buffers to Tozer Reserve are predominantly low, wildflower and native grassland areas. These provide very high conservation values, along with low fuel loads. Their regular maintenance can be coordinated so promote both conservation and fire protection requirements. They could be managed in a similar way to high value native grassland areas on rural roadsides. These areas are regularly burned and are an important part of rural management of fire risk. • The managed wildflower native grasslands would also be an important source of seed for other revegetation projects. • Shrubs are not typical of the dryland EVCs on this site. Only indigenous species consistent with the local vegetation and that are unlikely to become weedy should be used.

Statement in Ecological report	Response	Suggested improvements
on the outcomes of any targeted surveys undertaken within the study area; while there are no defined buffer requirements for Southern Bent-wing Bat and Grey-headed Flying-fox, if Growling Grass Frog is present a 50-metre buffer would be required in accordance with the Growling Grass Frog Habitat Design Standards (DELWP 2017d). Similarly, if the species is not present, a 20 metre buffer could be adopted to encourage dispersal into and future use of Russells Creek. This buffer would also allow for the use of the corridor by other mobile significant fauna, and common fauna such as kangaroos, wallabies and echidnas.		
p.66-67 Non-disturbance habitat zone 20 metres wide should be implemented wherever possible, to mitigate against edge effects and	Supported, but buffers need to be greater than 20 m.	• As previous. • Lighting is a particular concern. See details elsewhere in this submission.

Statement in Ecological report	Response	Suggested improvements
factor in bushfire hazard requirements. Non disturbance habitat zones are those that mitigate the impacts of noise, light, sound and human activity on the ecological values present, so the provision of open space, footpaths, amenities, lighting, etc in these areas should be avoided where possible. Principle F12.1 of the PSP 2.0 Guidelines (VPA 2021) speaks to the need for adequate buffers between waterways and urban uses, recognising that 'preserving and promoting access to waterways where possible 'should be an aim. Where community access to a waterway is desired, the non-disturbance habitat zone should be expanded in another area to balance the loss.		
p.66 Apply appropriate development setbacks from Tozers Reserve and Russells Creek. The	Supported, but buffers need to be greater than 20 m.	As previous

Statement in Ecological report	Response	Suggested improvements
applied setbacks will be dependent on a range of factors (e.g. flood modelling); however based on the ecological values present, it is considered that a non-disturbance habitat zone of 20 metres should be applied to these features (i.e. 20 metres from the reserve boundary and 20 metres either side of Russells Creek), alongside an additional buffer that accommodates the width required for passive/active open space.		
p.69-70 Active revegetation within buffers and areas of open space should be undertaken using appropriate indigenous species of local provenance. Revegetation targets should include: o Species selection that represents at least 30% of the original community's EVC diversity; and, o Canopy	Supported. Revegetation also needs to consider the changed site conditions due to the proposed subdivision, and the effects of climate change.	• Revegetation should be informed by a range of sources including: • Comprehensive surveys of Tozer Reserve and other relevant remnant vegetation • Historical maps • Climate change projections • Current site conditions • Need to move through several stages in establishing native vegetation in highly degraded areas (former paddock) including management of emerging weeds • Management of fire risk near housing and roads

Statement in Ecological report	Response	Suggested improvements
tree plantings that reflect EVC benchmark tree densities (where applicable).		
p.72-73 The biolink width should be as wide as possible, with a minimum 20 metre-wide non-disturbance habitat zone either side of Russells Creek, and additional buffer sufficient to accommodate any required open space. The non-disturbance habitat zone should cater for any significant species' requirements that may be assessed as present during the recommended targeted surveys (e.g. if Growling Grass Frog is present, adhere to the Growling Grass Frog Habitat Design Standards prepared as part of the Melbourne Strategic Assessment (DELWP 2017d), and apply a 20-metre buffer. If the species is not present, a buffer and rehabilitation regime in accordance with the Growling Grass	Supported, buffer needs to be more than 20 m. Plains Grassland is also a suitable EVC for revegetation purposes, along with a variety of wetland EVCs depending on wetland depth and water regime. For example the permanent spring-fed wetland at 43 Boiling Down Rd.	• As previous

Statement in Ecological report	Response	Suggested improvements
Frog Habitat Design Standards (DELWP 2017d) would be appropriate to encourage dispersal into and future use of the area by Growling Grass Frog.) Any revegetation activities should be undertaken using indigenous species associated with the Swamp Scrub and Plains Grassy Woodland EVCs, and in alignment with the Merri River Landscape Guidelines (WCC 2020). Plains Grassy Woodland vegetation provides scope to accommodate the needs of open space more readily than Swamp Scrub, given its more open structure and the presence of tree canopy.		
p.73 Tozers Reserve should be buffered from surrounding development via substantial vegetated corridors, at least 20 metres in width. Any public access areas or facilities should consider	Buffers need to be substantially more than 20 m to address all the disturbance issues associated with the proposed subdivision and ongoing use of the area. See table in 'Ecological context' at the beginning of this submission.	• Recommendations as per list in 'Ecological context' at the beginning of this submission. • Use fencing compliant with nature-fencing-requirements.pdf

Statement in Ecological report	Response	Suggested improvements
potential impacts on significant flora and fauna in the area and be sensitively designed to mitigate any adverse effects to the ecology, hydrology and aesthetic of the area. Aside from designated access points for management purposes or future pathways, the reserve should be fenced off to prevent unauthorised vehicle and trail bike access, and internal pathways should be formalised and fenced off in such a manner to deter off-track passive or active recreation. Any fencing should not prevent wildlife from accessing the reserve;	Fencing should be compliant with nature-fencing-requirements.pdf	
p.76 Retain all of Tozers Reserve and link it to Russells Creek through revegetation to promote fauna movement. Revegetate and enhance Russells Creek including a minimum 20 metre buffer either side, to act as a biolink connecting	Supported, but more than 20 m buffer required.	As previous

Statement in Ecological report	Response	Suggested improvements
through to the Merri River downstream.		
p.78 Apply appropriate buffer widths to biolinks and conservation reserves: provide a core 'non disturbance' habitat zone of at least 20 metres to support ecological values, in addition to buffers either side for open space. These buffers should also balance the need to maintain key view lines and enhance the safety of park users as per the Merri River Landscape Guidelines (WCC 2020) and the PSP 2.0 Guidelines (VPA 2021). If significant species are recorded during any targeted surveys (e.g. Growling Grass Frog), these buffer widths will require revision.	Supported, but more than 20 m buffer required.	As previous
p.79 Active revegetation within buffers and areas of open space should be undertaken using appropriate indigenous species of local provenance (Section 5).	Supported	The species mix should also consider climate change adjustments

PSP Document	Response	Suggested improvements
1.3 Regional Context includes: • Cultural • Historical • Strategic Policy	The ultimate context for this proposal is the land and environment. Warrnambool and surrounds have been overwhelmingly cleared in the process of colonisation (see EVC mapping comments) Any surviving natural areas are of immense value whether they include threatened species or not.	• Include land and environment as a fundamental context for the proposal. • Recognise the huge losses that have occurred. • Make biodiversity conservation, restoration, and expansion, an integral part of the planning proposal.
1.4 Precinct features Russells Creek Waterway Corridor The creek presents opportunities for integrated water management, passive open space, cultural values and ecological restoration. The alignment of Russells Creek will influence the structure of development parcels and road network.	As previous. The different values mentioned are unlikely to be simultaneously addressed in the same area of land. Human use, and nature use are often incompatible.	• Refer to information on buffers.
1.4 Precinct features Francis Tozer Memorial Reserve (Tozer Reserve) ... It forms a key anchor for open space planning within the precinct and provides a valuable interface with the adjoining established neighbourhood. The reserve contains cultural heritage significance and ecological values and presents opportunities for integration with future shared path networks, bushfire management areas and active open space corridors.	The primary value of Tozer Reserve is for conservation. This needs to be clearly stated. Public space objectives for over 11,000 people are incompatible with conservation values for a small reserve.	• The public space available to people needs to exclude Tozer Reserve, and be sufficient in area and quality in the short and long term to attract over 11,000 people away from Tozer Reserve.
1.4 Precinct features Scattered vegetation and shelter belts The landscape includes areas of native vegetation, planted windrows, and shelter belts, particularly along drainage lines and former property boundaries. These provide habitat value and opportunities for integration into new developments.	Drainage lines need to be considered in planning, not just bulldozed away. Existing vegetation is valuable and should be protected, particularly for nesting and roosting.	• Protect the natural topography of the land, including drainage lines.

PSP Document	Response	Suggested improvements
	It takes at least 20 years to grow a decent tree.	• Use this topography to inform design of streets and open space areas. • Protect existing trees to provide continuous habitat values for wildlife during and after the development.
2 PSP OUTCOMES 2.1 PSP vision The East of Aberline Precinct is a series of residential neighbourhoods integrated with Warrnambool's established urban areas, parks and creek trails. It is vital to Warrnambool's identity as a regional city blending coast and country. This precinct is a sustainable, vibrant, green and resilient community that honours the cultural values of the Peek Whurrong and Kirrae Whurrong people of the Eastern Maar Nations. The precinct is a diverse, inclusive residential community with affordable housing. Higher density development near shops and parks encourages walking and cycling. Co-located community, recreation and education facilities at Russells Creek Civic Precinct and the Horne Road Neighbourhood Activity Centre form accessible hubs enhancing residents' lives. Sustainable transport is supported, with tree-lined streets and dedicated infrastructure for safe cycling, walking, and public transit. Active transport corridors and infrastructure connect the community to Warrnambool's established areas, promoting healthy movement. The road network is designed for safety and efficiency, accommodating goods and services movement. The precinct will support the enhancement of ecological values and protect biodiversity corridors, particularly along Russells Creek and Tozer Reserve. A restored and interconnected habitat network will support the recolonisation of threatened species such as the Growling Grass Frog, while fostering broader environmental resilience. Conservation areas will provide vital ecological functions, incorporating wetland restoration, terrestrial habitat buffers, and hydrological enhancements to sustain local fauna and flora.	The vision is a great start, but limited. It does not properly consider the conservation values of the location or climate change projections. The proposed actions/implementation do not provide for this vision to be realised, and many of the proposed actions would prevent the vision from ever occurring.	• Refer to Eastern Maar Country plan and Pareeyt Nation Statement (available on website) for a more comprehensive understanding of Eastern Maar cultural values. • See enhanced vision elsewhere in this document. • See details elsewhere in this submission on how implementation needs to be consistent with vision.

PSP Document	Response	Suggested improvements
2.2 PSP purpose The East of Abeline PSP aims to facilitate: 1 A unique and contextually appropriate urban environment that responds to its surrounding landscape character, topography and environmental considerations. 2 Diverse housing types to meet a range of affordability needs. 3 The timely delivery of new homes through a well-structured planning framework that coordinates land use, infrastructure provision and sequencing. 4 Urban growth through the coordinated delivery of transport and transport infrastructure upgrades that improve local connectivity, safety and access to services. 5 A connected and inclusive neighbourhood by integrating an active transport network that links schools, community facilities, the local town centre, Tozer Reserve and Russells Creek. 6 Resilient, sustainable urban development that reflects Warrnambool's rural character and responds to the impacts of climate change 7 Opportunities to identify and celebrate important Aboriginal cultural heritage connections with Country through consulting with Peek Whurrong and Kirrae Whurrong people of the Eastern Maar Nations. 8 An integrated and sustainable approach to management of water that responds holistically to drainage considerations and prioritises sustainable consumption. 9 The protection and enhancement of Russells Creek and Tozer Reserve as multifunctional landscape corridors that provide habitat for native species, manage water sustainably, and enable the long-term recolonisation of the Growling Grass Frog.	The PSP purpose is suitable, but the implementation strategies included do not meet the vision or purpose.	• Incorporate more local knowledge and a greater recognition of the huge impact that over 11,000 people living in this place will have on the existing values. • Aspirations need to be backed up by practical boundaries, limits, and actions to ensure the liveability of this area for people and other-than-human life. • See elsewhere in this feedback.
Plan 2 Place Based Plan East of Abeline Precinct Structure Plan		•
Figure 1.	Tozer Reserve is one of the largest inland natural environments in Warrnambool. Its primary value is environmental protection, not 'open space'. Promoting it as public space for 4,500 homes places incredible pressure on the plants and animals which already call the Reserve home.	• Tozer Reserve and its biodiversity values should be conserved, protected, and expanded. • Buffers of at least 60m width should be defined on the north-south boundaries of the Reserve.

PSP Document	Response	Suggested improvements
residential 64.51% activity centre 0.73% transport 2.04% community 0.82% education 3.29% open space 22.67% other 5.94%	The open space contribution should not include Tozer. Sufficient open space should be supplied within the development area. Likewise, the frontages of Russell's Creek have a primary value for protection of the Creek, and restoration of biodiversity values.	- The recommended buffer width for riparian vegetation is ????? - Department of Sustainability and Environment April 2010 Birgita Hansen, Paul Reich, P. Sam Lake, Tim Cavagnaro School of Biological Sciences, Monash University Microsoft Word - Riparian_Report.doc
3 IMPLEMENTATION 3.1 Viable densities 3.1.1 Objectives – viable densities		
G5 Residential subdivision and development that contributes to meeting the 11.3% affordable housing target is encouraged. (T4)	This should be more than encouraged and the target should be higher.	G5 Residential subdivision and development that contributes to meeting the 11.3% affordable housing target is required.
G6 Where affordable housing is provided, affordable housing products should be predominately located in higher amenity areas close to services, public transport and community facilities and provide for a range of housing typologies to meet demonstrated local needs having consideration to Table 1 Housing density and diversity. (T4)	Supported.	
G8 Specialised housing forms, such as lifestyle communities, retirement living, or aged care	Supported.	Include housing for single people, including single

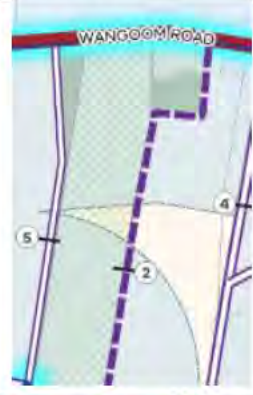
PSP Document	Response	Suggested improvements
		women. This type of housing has particular needs. • Include disability housing.
Table 1 Housing density and diversity	Housing to four storeys is proposed.	• Housing to four storeys is proposed. Housing of this density should be balanced by more open space areas, including places for passive recreation and meeting places (not just playgrounds). • Housing for families should include housing for non-nuclear families. Larger lots do not automatically create a 'strong community setting'. Places where kids can safely play beyond their home, as well as safe walking and bike-riding are important. • Large lots can encourage large houses, rather than more space for kids. Place limits on the footprint and total floor area (including paving) of houses. • Higher development also needs to consider shading, water management, and space for vegetation to

PSP Document	Response	Suggested improvements								
		ensure the liveability of outdoor spaces.								
LOW DENSITY/TRANSITIONAL AREA	Applies to land interfacing with Tozer Reserve and interfaces with Farming Zoned land to the east of the PSP. It is assumed that Lower Density housing and larger lots would create a better transition to Tozer Reserve. This is not necessarily the case.	• Provide evidence about the type of housing which least affects conservation areas. Consider multiple aspects including greenwaste dumping, noise, dogs and cats etc. • More dedicated space buffering the Reserve and a higher housing density is likely to produce better outcomes in the long term. See the information about what Tozer Reserve needs for its buffer and boundary.								
Table 3 Affordable housing delivery guidance	Why is there no ‘very low’ income band for housing? A high percentage of one-bedroom houses is desirable given the shift in social demographics. The definition of ‘very low’ income (Governor-In-Council-Order-1-July-2023.pdf) in Victoria is: Table 2 – Rest of Victoria <table><tr><td></td><td>Very low income range (annual)</td></tr><tr><td>Single adult</td><td>Up to \$21,700</td></tr><tr><td>Couple, no dependant</td><td>Up to \$32,550</td></tr><tr><td>Family (with one or two parents) and dependent children</td><td>Up to \$45,570</td></tr></table>		Very low income range (annual)	Single adult	Up to \$21,700	Couple, no dependant	Up to \$32,550	Family (with one or two parents) and dependent children	Up to \$45,570	• Include housing for all
	Very low income range (annual)									
Single adult	Up to \$21,700									
Couple, no dependant	Up to \$32,550									
Family (with one or two parents) and dependent children	Up to \$45,570									

PSP Document	Response	Suggested improvements
	The age pension for Australia is: \$25,952.20/year (single) \$40,263.60/year (couple) Surely these people deserve housing too?	
Plan 3 Housing East of Aberline Precinct Structure Plan	Low density housing adjacent to Tozer Reserve is not desirable. Larger lots are more likely to include cats and dogs which will affect wildlife, whether they are in their yards, or moving freely.	Design housing to reduce impacts of dogs and cats on Tozer Reserve.
3.2 Safe, accessible, and well-connected 3.2.1 Objectives		
		Additional objective should be to reduce the negative effects of roading and transport networks on environmental values, including movement of wildlife
		Additional objective should be to provide shaded walking networks.
		Additional objective, pedestrian/bike movement should take priority over large vehicle movement with pedestrian crossings, traffic slowing and calming physical structures.
		Additional objective, road network should create intuitive and direct pathways for evacuation of housing

PSP Document	Response	Suggested improvements
		areas during emergency situations (e.g. bushfire, flood). Major access roads should not be constructed across Russells Creek as people tend to use their familiar roads when under stress.
R8 New developments fronting Russells Creek must provide pedestrian and cyclist crossings for walking and cycling to key destinations of Russells Creek Civic Precinct and activity centres, generally in accordance with Plan 4 Movement and Network. These crossings should be provided every 400 metres where appropriate, along roads, waterways, and any other accessibility barriers, except in the instance of Tozer Reserve.	Supported.	
G10 A variety of cross sections should be used in subdivision layouts for local streets, to create differentiation, sense of place and neighbourhood character. (T5, T6) Alternative cross sections should ensure that: • Relevant minimum road reserve widths for the type of street are maintained. • Sufficient provision is made for street tree planting to achieve 30% canopy tree coverage in the public realm (excluding areas dedicated to biodiversity, native vegetation conservation, and drainage assets). (T13) • The performance characteristics of standard cross sections are maintained, including provision for pedestrian and cycle use.	The current proposal is much too dense to allow the development of 30% tree coverage. Tree roots occupy approximately the same area as tree canopies. Paved areas are not suitable for tree roots. Uncovered (by buildings or paving) areas also need to include other greenery (grass, shrubs, vegetable gardens etc.). What is the timeline for establishment of 30% tree canopy coverage?	• What is the enforcement mechanism for establishment and protection of 30% tree canopy coverage? • Clearly demonstrate with accurate maps (not vague landscaping documents) and written support material how the proposal provides sufficient space (<i>excluding areas dedicated to biodiversity, native vegetation conservation, and drainage assets</i>) and mechanisms for ongoing 30% tree coverage including:

PSP Document	Response	Suggested improvements
		• Sufficient undisturbed ground area for trees that will develop canopies • Sufficient ground area for other green spaces • Timeline for establishment of 30% tree canopy coverage • Mechanisms for establishment of 30% tree canopy coverage • Mechanisms for enforcement of protection of 30% tree canopy coverage.
G13 Street layouts should create frame views to places of visual interest such as Tozer Reserve and Russells Creek, as identified in the Aberline to Horne Growth Corridor Landscape and Viewshed Assessment (prepared by Spiire January 2018).	Framed views should be only one of the considerations in street design.	• Framed views should be of an appropriate distance and scale, not 'long views'
G14 Development should include frontage roads to all edges of open spaces. Where frontage roads are not provided, an access way should be provided to the satisfaction of the responsible authority.	Supported.	• Frontage roads to Tozer Reserve should not be major access roads to the subdivision.
Below outlines the delivery responsibilities of initial developers and subsequent developers, unless otherwise agreed by the Responsibility Authority, with Figure 2 showing the implementation concept. ... Nature Strip (including landscaping)		• Nature strips and public space should be established and planted with trees and other vegetation as early as possible in the subdivision process, not left until last.
Plan 4 Movement Network East of Aberline Precinct Structure Plans	Roads adjacent to Tozer Reserve are highly undesirable.	• Provide a 100 m buffer between Tozer Reserve and roads on both western and

PSP Document	Response	Suggested improvements
	Major access roads from Wangoom Road should not run adjacent to Tozer Reserve. These roads are a big concern because of: • Risk to wildlife – collision and discouragement from using space • Fire risk – people tossing cigarettes or matches into Reserve • Litter risk – people tossing rubbish into reserve.	eastern sides of the Reserve.
	Major access road crosses bridge over Russell's Creek Bus access road to nowhere Major thoroughfare between Boiling Down Rd and Wangoom Rd runs along western edge of Tozer Reserve and crosses Russell's Creek Risks to: • Wildlife • Pedestrians moving along Russell's Creek corridor • Access risk during floods	• Bridge across Russell's Creek at this point should be pedestrian and emergency access only.
3.3 High quality public realm 3.3.1 Objectives - High quality public realm		•
O10 To recognise, protect, and celebrate Aboriginal cultural heritage by embedding cultural values and stories throughout the precinct's design, landscape, and public spaces. R14, R26, G14, G15	This objective does not recognise that Eastern Maar make decisions about their culture and how it will be represented. This objective restricts Eastern Maar interests to those listed when they may be much broader	• Reword objective to recognise Eastern Maar as the knowledge holders for their culture and how it might be used in the precinct.

PSP Document	Response	Suggested improvements
O12 To create a climate-resilient urban environment that enhances biodiversity, supports sustainable water and drainage systems, and integrates natural features to protect and strengthen ecological values. R16, R17, R18, R19, R20, R23, G11	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
O13 To retain and protect features of the natural environment that make an important contribution to local character, amenity, culture and ecology. R21	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
O14 To facilitate the development of streetscapes, local parks, sports reserves, and recreational facilities that are safe, functional and enjoyable. R24, R25, R27, R28, R29, R30, R31, G12, G13, G16, G17 Street cross sections	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
O15 To support the establishment of cooler, greener neighbourhoods through canopy tree cover, green infrastructure, and the integration of natural and landscape features that reinforce local character and amenity. R9, R10, R16	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
O16 To develop sustainable water, drainage and wastewater systems that protect, conserve, and improve biodiversity, waterways and other natural resource and maintain or enhances the safety, health and wellbeing of people and property." G14	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
O17 Ensure that bushfire risk is considered in the layout, staging and design of development R22	Objective supported. The actions in the PSP do not fully support this objective.	• Ensure actions fully support the objective. • See comments elsewhere in this submission for details
3.3.2 Requirements and guidelines - High quality public realm		•
R16 Eastern Maar cultural heritage and post-contact historic heritage sites must be recognised through the design of public places, infrastructure and interpretive installations. Opportunities should be explored through the creation of cultural heritage interpretation trails along proposed escarpment parklands, in consultation with relevant stakeholders. Signage or interpretive opportunities should be integrated	This objective does not recognise that Eastern Maar make decisions about their culture and how it will be represented. This objective restricts Eastern Maar interests to those listed when they may be much broader	• Reword objective to recognise Eastern Maar as the knowledge holders for their culture and how it might be used in the precinct.

PSP Document	Response	Suggested improvements
into the public realm to contribute to the knowledge and understanding of the local area's Aboriginal cultural and historic cultural history.		
R19 Canopy tree coverage within the public realm must achieve a minimum of 30% coverage (excluding areas dedicated to biodiversity or native vegetation conservation, or drainage assets, or affected by the BMO). (T13)	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R20 The design of the subdivision and development must facilitate the retention of existing canopy trees to contribute to the 30% canopy tree over target, where practical. (T13)	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R21 Street trees must be provided on both sides of all roads/streets (excluding laneways) generally in accordance with the cross-sections, any relevant Warrnambool City Council policy, and at regular intervals appropriate to tree size at maturity. Alternative street tree planting arrangements may be considered by the responsible authority where site specific constraints restrict street tree planting on both sides of the street.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R22 The retention, enhancement and integration of the natural environment, landscape features and places of Aboriginal cultural values must be considered through subdivision design, and, where applicable, building and landscape design.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R23 Conservation areas identified in Plan 5 Public Realm must be retained in accordance with this plan and relevant Commonwealth and State government legislation and policies unless otherwise agreed by the Responsible Authority.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details - PPRZ is not an appropriate zoning for a conservation area.

PSP Document	Response	Suggested improvements
R24 Vegetation or development within bushfire hazard areas shown on Plan 7 Bushfire must be managed unless otherwise agreed by the responsible authority and relevant fire authority.	Supported	• Details on how this will be achieved are not adequately provided. • See comments elsewhere in this submission for details
R25 Any reserve, biolink, or conservation area to be vested in the relevant authority must be transferred in a state that satisfies the requirements of that authority. Works required prior to the transfer include, but may not be limited to: • Clearing of rubbish, weeds and contaminated soils; • Essential repairs to and stabilisation of any structures; and • Any fencing required to ensure the safety of the public. Any works carried out must be consistent with the approved conservation masterplan.	Supported	• Details on how this will be achieved are not adequately provided. • See comments elsewhere in this submission for details
R26 Development on land within and abutting Russells Creek corridor and Tozer Reserve Conservation Corridor must prepare a Conservation Area Masterplan for the section on the same ownership in accordance with Growling Grass Frog Habitat Design Standards MSA (DELWP, 2017) to the satisfaction of the responsible authority. The Conservation Area Masterplan must: • Include wetland-level and landscape-level design objectives for habitat management through preserving and maintaining existing wetland features and waterways, and improving potential locations (as identified on Plan 8) which Growling Grass Frog are likely to occur or repopulate. • Provide a 30 metre riparian habitat buffer or biolink either side of Russells Creek to support the establishment of the conservation corridor. and delineate the conservation corridor from other open space in the precinct. • Provide for the reinstatement of the hydrological conditions of Russells Creek and Tozer Reserve. • Include a vegetation plan in line with Swamp Shrub EVA and Plains Grassy Woodland EVC. R26 • Design the biolinks and in-stream pools of low flowing water, natural barriers to water flow and varying bank grades. • Identify local parks and recreation areas occur adjacent to conservation areas to compliment the outcomes of the conservation area or biolinks. • Demonstrate drainage infrastructure and shared path alignment along Russells Creek incorporates the Growling Grass Frog-friendly design elements, in accordance with Growling Grass Frog Habitat Design Standards MSA (DELWP 2017), where feasible • Design any public lighting to prevent light spill and glare within and adjacent to the potential habitat in accordance with the relevant guidelines • Integrate the design of the	Supported	• Details on how this will be achieved are not adequately provided. • See comments elsewhere in this submission for details • Reinstatement of the hydrological conditions of Russells Creek and Tozer Reserve will require attention to a wider range of information sources including historical maps (Appendix 1). • The Water Reserve should also be included in this objective. • Lighting design is particularly important near Tozer Reserve and Russells Creek and should follow

PSP Document	Response	Suggested improvements
conservation habitat/links with the opportunities for recreation and biodiversity-related learning • Design any crossings over the conservation corridor in accordance with Growling Grass Frog Crossing Design Standards (DELWP, 2017) to minimise impacts on Matters of National Environmental Significance • include signage and public art that acknowledge the biodiversity values of the creek corridor. Development that includes areas designated as conservation must be in accordance with the approved masterplan.		guidelines for lighting for wildlife.
R27 Development of land that contains existing native vegetation patches and potential vegetation retention area as identified by Plan 8 Native Vegetation Retention and Removal and/or abutting the Russells Creek and Tozer Reserve Conservation Corridor must: - Retain existing native vegetation including potential roosting habitat and flowering Eucalypts and provide indigenous revegetation opportunities to provide habitat and movement corridors for local fauna - Locate open space network and conservation links adjacent to significant landscape value areas, existing vegetation and waterways to create and enhance buffer area - Incorporate existing ponds, where practical, and WSUD initiatives to maximise water use efficiency and long-term viability of vegetation to the satisfaction of the responsible authority.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R28 All parks and areas of open space must be located, designed and developed to the satisfaction of the responsible authority generally in accordance with Plan 5 Public Realm and Water and Land Use Budget, unless otherwise approved by the responsible authority.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details
R29 Encroachment or intensification of development must not occur within the Russells Creek Conservation Corridor. Drainage infrastructure must minimise impacts on biodiversity values and Aboriginal cultural values, particularly habitat for matters of national environmental significance located within conservation areas.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details 'Buffer Creep' is an important phenomenon which must be considered in design.

PSP Document	Response	Suggested improvements
		Increases in fire risk as climate change continues also need to be incorporated in design of public space areas.
Drainage, Waterways and Integrated Water Management	The current drainage proposal does not protect the natural surface and subsurface drainage patterns into and from Tozer Reserve. These drainage patterns are essential for supporting the biodiversity of the Reserve, including seasonally wet or damp areas. For example, Plan G6 shows a 'major overland water path' running parallel to Tozer Reserves western boundary. Water flow paths in Plan G6 are direct, rather than slowing down the movement of water to allow infiltration of water to support growth of trees and other vegetation within the development, particularly with climate change projections for a generally drier climate. The proposed 6.4m canopy diameters will require adequate water to achieve a suitable growth rate and canopy cover.	- Demonstrate that proposed drainage will protect the natural surface and subsurface drainage patterns into and from Tozer Reserve. - Integrate Water Sensitive Urban Design to retain water within the development to support growth of vegetation, and wildlife values.
R30 Development must: • provide for the delivery of appropriate ultimate waterway and drainage infrastructure, including stormwater detention, quality treatment and volume control (as applicable), • consider opportunities for early establishment of waterways. • Address the staging and timing of stormwater drainage works, including any interim flood mitigation works and temporary outfall provisions. To the satisfaction of Glenelg Hopkins Catchment Management Authority and the responsible authority.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details

PSP Document	Response	Suggested improvements
R31 Drainage infrastructure must be designed to satisfy the requirements of the responsible authority, including any interim flood mitigation works, to the satisfaction of Glenelg Hopkins Catchment Management Authority (GHCMA). Applications must demonstrate: • GHCMA freeboard requirements for finished floor level of buildings to be set at least 300 millimetres above the 1%AEP (climate change), excluding garages, are met • GHCMA balanced cut and fill requirements to ensure lots are filled 300 millimetres above the applicable 1%AEP (climate change) flood level are met. • GHCMA requirement for roads to be no lower than 300 millimetres below the 1%AEP (climate change) are met. to the satisfaction of the responsible authority and/or GHCMA.	Supported	- Details on how this will be achieved are not adequately provided. - See comments elsewhere in this submission for details - The 1%AEP needs to consider the headwaters of Russells Creek and the Water Reserve.
R32 Waterways must: • Provide safe drainage and flood protection • Incorporate environmental, cultural and amenity value • Provide open waterways all to the satisfaction of Glenelg Hopkins Catchment Management Authority and the responsible authority	Supported	Meeting these multiple objectives needs to be explicit in planning documentation
R33 Stormwater conveyance and treatment must be designed to avoid or mitigate the risk of erosion from sodic and/or dispersive soils to the satisfaction of the responsible authority.	Supported	
R34 Stormwater runoff from the development must meet the performance objectives of the Commonwealth Scientific and Industrial Research Organisation Best Practice Environmental Management Guidelines for Urban Stormwater prior to discharge to receiving waterways, unless otherwise approved by Glenelg Hopkins Catchment Management Authority and the responsible authority. Proposals that exceed the performance objectives are highly encouraged and can be considered, all to the satisfaction Glenelg Hopkins Catchment Management Authority and the responsible authority	Supported. Observation of recent subdivisions elsewhere in Warrnambool shows this does not occur	Provide substantial guidance, monitoring, and when necessary penalties and public censure to ensure Best Practice Guidelines are followed.
R35 Permit applications for subdivision and/or development must be accompanied by an appropriate integrated water management plan which clearly identifies how development will contribute towards the strategic outcomes applicable to the development identified in the DEECA Great South coast IWM Strategic Directions Statement, to the satisfaction of Wannon Water, Glenelg Hopkins Catchment Management Authority and the responsible authority.	Supported	Ensure local knowledge is incorporated in assessment of this plan, including historical water flows, springs, and all waterbodies.
Bushfire Requirements		

PSP Document	Response	Suggested improvements
R36 Development adjoining bushfire hazards shown on Plan 8 Bushfire must be setback in accordance with the corresponding bushfire hazard designations to the satisfaction of the responsible authority and relevant fire authority.	Supported, but needs to be stronger	Needs to recognise that bushfire risk will continue to increase, and that building setbacks and buffers need to be designed to allow for future change (without having to remove buildings or lose native vegetation)
R37 Any vegetation located in a setback required for bushfire purposes must be managed in accordance with the following requirements, unless otherwise agreed by the Responsible Authority and relevant fire authority: - Grass must be short cropped and maintained during the declared fire danger period. - All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period. - Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building. - Plants greater than 10 centimetres in height must not be placed within 3 metres of a window or glass feature of the building. - Shrubs must not be located under the canopy of trees. Individual and clumps of shrubs must not exceed 5 square metres in area and must be separated by at least 5 metres. - Trees must not overhang or touch any elements of a building.	Supported	- Use of native wildflower and grassland areas can provide substantial habitat areas, while still meeting bushfire requirements - Having low density housing close to Tozer Reserve would make this more difficult to achieve.
R38 Development and subdivision must provide for a perimeter road or alternative bushfire interface for the entire width of the corresponding bushfire hazard area identified on Plan 7 Bushfire.	Supported	- The roads adjacent to Tozer Reserve should not be the main access roads to/from Wangoom Rd. - Access roads to the development should not be bounded by flammable vegetation, as per CFA guidance.
Cultural and Post-contact Heritage Requirements		
G15 Aboriginal and historic cultural heritage should be recognised through the design of public places, infrastructure and interpretive installations. Meaningful opportunities should be explored through cultural heritage interpretation trails	This objective does not recognise that Eastern Maar make decisions about their culture and how it will be represented.	Reword objective to recognise Eastern Maar as the knowledge holders for

PSP Document	Response	Suggested improvements
along public path networks in areas of known historic cultural history or areas of Aboriginal cultural heritage sensitivity, in consultation with relevant stakeholders.	This objective restricts Eastern Maar interests to those listed when they may be much broader	their culture and how it might be used in the precinct.
Public Realm, Open Space and Biodiversity Requirements		•
G16 Canopy trees should have an average canopy foliage of 6.4m in diameter at maturity in summer. Where this cannot be achieved because of local climate and soil conditions, a suitable species should be selected which closest achieves this canopy cover, to the satisfaction of the responsible authority. (T13)	Supported in part. There is no time scale put on when the canopy cover should be achieved.	• If canopy cover for individual trees cannot be achieved, then more trees should be planted so the overall canopy cover is achieved. • Planting should occur as early as possible in the development to maximise canopy cover when people move in.
G17 The design of subdivision and development should facilitate the retention of existing canopy trees to contribute to the 30% canopy tree cover target where practical. (T13)	Supported	•
G18 Passive irrigation of street trees should be provided. Alternative irrigation may be considered where it can be demonstrated through a comprehensive alternative plan (such as an Integrated Water Management Plan) that passive irrigation is either unnecessary or inferior to the proposed alternative. (T13, T14)	Supported	• The design of street locations, orientations, and structures is important in achieving this objective. • Guidance should be given on how to achieve this objective. • Retention of water within the subdivision is important for establishment of gardens on individual properties.
G19 Movement corridors for local fauna and adjacent land uses should be designed and managed sensitively in accordance with a management plan, and to enhance community access and experience of the conservation and landscape value areas. (T16)	The current proposal offers limited opportunities for fauna, including invertebrates, to move across the landscape. It is not sufficient to only	• The subdivision itself should incorporate opportunities for wildlife to move across the land, and for people to

PSP Document	Response	Suggested improvements
	provide a single movement corridor along Russells Creek.	enjoy other living things in their living environment. There is abundant evidence that connection with nature improves mental health. • Wildlife movement can be facilitated by: • Including wildlife protection and conservation as a genuine goal of the development • Including wildlife protection and conservation as part of the identify of the development • Water sensitive urban design options like vegetated swales and ponds WITHIN the development • Corridors and nodes of indigenous vegetation including all life forms (tufties, wildflowers, shrubs, trees etc.) • Plant species suitable for invertebrates (including insects, ground species), herpetofauna, birds, small mammals (e.g. possums, bats). • Providing residents with quality information and

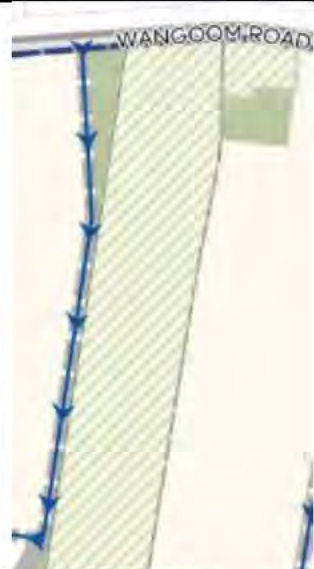
PSP Document	Response	Suggested improvements
		support so they can incorporate wildlife habitat within their properties.
G20 Subdivision layouts should include frontage roads to all edges of open spaces. Where frontage roads are not provided, an access way should be provided to the satisfaction of the responsible authority. This guideline does not apply where community hubs or drainage reserves front open spaces.	Supported in part	- Open spaces adjacent to schools, shopping precincts and other facilities don't need to be completely surrounded by roads. - Small natural areas threaded through residential areas may also benefit from not having frontage roads. For example, natural areas around connecting pathways.
G21 Vegetation removal can be considered if it is necessary to provide for the functional and operational needs of infrastructure, including, drainage, community infrastructure, and the road network.	No supported	- Good design can prevent the removal of native vegetation. - What is considered 'necessary' depends on the value system of the person making the decision, e.g. a roading engineer, versus an ecologist
G22 Native vegetation identified on Plan 8 should be retained as far as practical to the satisfaction of the Responsible Authority.	No supported	What is considered 'practical' depends on the value system of the person making the decision, e.g. a roading engineer, versus an ecologist

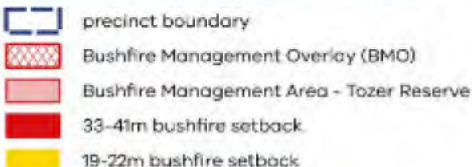
PSP Document	Response	Suggested improvements
G23 Alternative locations and configurations for local parks shown on Public Realm Plan, may be considered subject to: • Open space being retained within the same landownership, unless otherwise agreed with the affected landowners. • not diminishing the quality or usability of the space • not adversely affecting walkable accessibility of the network • not adversely affecting the overall diversity of the precinct's open space network		• The configuration of local parks needs a lot more work. Particularly it needs to consider the natural shape of the land and naturally wet areas (the flats on historic plans) • Designing to suit the land and natural drainage is mentioned as a priority elsewhere.
G24 The design and layout of public open space within commercial and residential areas, community facilities and sporting reserves should consider space for growing, harvesting, distributing, and consuming food where appropriate. This should be achieved using Flood Sensitive Planning and Urban Design initiatives such as urban farming, raised garden beds, car space gardens, rooftop gardens and community gardens that utilise rainwater or recycled water as negotiated with Wannon Water.	Supported, but needs to be stronger	• It MUST INCLUDE, rather than just consider. • Fruit trees (especially lemons which everyone wants) are an important feature. • Food security is particularly important for low income areas. • Perennial vegetables can reduce maintenance. • Areas for school farms should be identified.
G25 Development and road layout should respond to significant landscape features, places of Aboriginal cultural heritage and values, and existing vegetation in a way that the layout: • acknowledges Aboriginal cultural values, in consultation with the Eastern Maar Aboriginal Corporation and any other relevant stakeholders. • supports an urban structure that is easy to understand and navigate. • retains and protects landscape features and existing vegetation that make a significant positive contribution to place character, amenity, cultural and/or ecological values.	Supported, plus natural drainage and water features and existing dams.	• Water retention on the site is extremely important for establishment of vegetation in public and private areas. • Naturally damp/wet areas need to be considered.

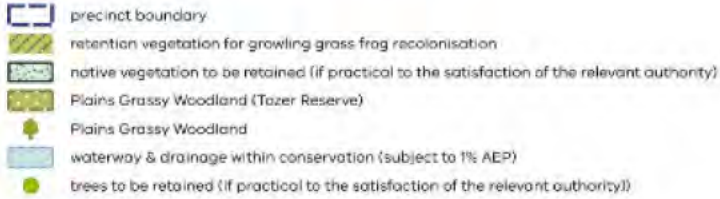
PSP Document	Response	Suggested improvements
incorporates the sense and experience of the natural environment into the planned urban character • facilitates space between buildings to enable landscaping to establish. • uses focal points for view lines along streets such as views towards areas of open space such as Russells Creek and Tozer Reserve • provides for increased provision of tree canopy cover in the public realm over time. The above should be delivered in consultation with relevant stakeholders.		Existing farm dams currently provide water in the environment and should be kept and adapted so they provide better environmental and amenity values.
G26 Crime Prevention Through Environmental Design (CPTED) principles, and in particular the provision of positive address and good passive surveillance from adjoining development, should guide the design of open spaces and associated infrastructure.	Supported with additional comments	Well maintained and used facilities also contribute to Crime Prevention. Without maintenance even the best design won't work.
G27 A consistent suite of lighting and furniture should be used across neighbourhoods, appropriate to the type and role of street or public space to the satisfaction of the responsible authority.	Partly supported. Rather than same everywhere, using a different (but complementary) suite can help people to identify and navigate environments. It also creates a better sense of local place. All lighting should be wildlife friendly.	- Follow national guidelines for lighting - Use a range of complementary suites of hard landscaping to create a sense of place, variety, and identity across the development.
Drainage, Waterways and Integrated Water Management		
G28 Water sensitive urban design (WSUD) measures should be implemented to the satisfaction of the responsible authority. Proposed landscape plantings as part of WSUD measures must predominantly constitute indigenous species of local provenance.	Partly supported	ALL landscape plantings for WSUD should be indigenous species of local provenance, other than where a sterile, non-invasive grass species is needed for amenity purposes. No environmental weeds or invasive species are to be included in landscaping.

PSP Document	Response	Suggested improvements
G29 Development should be designed to: • Reduce reliance on drinking water. • contribute to a sustainable built environment through utilisation of alternative water where appropriate, including rain/stormwater harvesting and recycled water. • Improve stormwater quality. • Maximise habitat values for local flora and fauna species. • Manage surface and groundwater quality and hydrological regimes to protect environmental values.	Partly supported. Do you mean 'Reduce reliance on piped potable water'? This makes it sound like we need to drink less. Allowing water to infiltrate naturally into the soil is extremely important for maintaining soil moisture, and allowing growth of plants.	• With up to four storeys, how will people be able to collect water? Will there need to be community water tanks for community gardening? • Ensure natural 'flats' that are likely historical wetlands are respected in design of development. Also drainage lines and Water Reserve.
G30 Subdivisions should create opportunity for rainwater capture to support the augmentation of a roof water harvesting network as part of broader water sensitive urban design initiatives which can assist with climate resilience, reduce nuisance flooding and reduce stress on water catchments of environmental significance	Supported	• As elsewhere, keeping water in the soil is a priority, not just putting it in tanks.
G31 Where primary waterway, conservation or recreation functions are not adversely affected, land required for integrated water management initiatives (such as stormwater harvesting, aquifer storage and recovery, sewer mining) should be incorporated within the precinct open space system as depicted on Plan 6 Water.		• With extreme caution
Table 5 Open Space LOCAL PARK NETWORK Ten parks of 0.22-1.4 hectares.	The current open space network is inadequate for the needs of over 11,000 people. The supporting documents repeatedly treat Tozer Reserve as if it can be part of a recreational space. Tozer Reserve's most important values are for conservation, and for education related to that. Tozer Reserve's values cannot be replicated, or replaced elsewhere, and there is nowhere else in the district with these values.	• Explicitly recognise in planning documentation that Tozer Reserve is not available for general recreation. • Move local parks away from Tozer Reserve, so there is a clear delineation between conservation and recreational spaces • Provide a much more comprehensive and expansive local park

PSP Document	Response	Suggested improvements
	The local park network needs to be completely reviewed for this subdivision proposal.	network to properly meet the needs of future residents for green space, open space, climate cooling, and natural views. • Provide this network throughout all of the subdivision so parks are part of everyday life, not just small isolated places you can commute too.
Table 6 Water infrastructure DRAINAGE SCHEME Plan 5 Public Realm East of Aberline Precinct Structure Plan		•
		• Move public parks away from Tozer Reserve so that Conservation space and Recreational space are clearly delineated. • Provide a clear visual/functional boundary between Tozer Reserve and the Russells Creek precincts.
Plan 6 Water East of Aberline Precinct Structure Plan		•

PSP Document	Response	Suggested improvements
	Having a major drainage line running parallel to the western boundary of Tozer Reserve is highly undesirable. It is likely to change the natural water movement in and out of the Reserve and affect conservation values. Works to date have already affected water in Tozer Reserve.	• Move major drainage lines away from Tozer Reserve. • Design drainage network so it restores and conserves natural drainage in and out of Tozer Reserve.
	The Water Reserve (43 Boiling Down Rd) has not been properly considered in the water plan. Including all retaining basins close to Russells Creek is not appropriate as sediment is likely to be flushed into natural waterways during high rainfall or flooding events.	• Include the Water Reserve in water planning • Include existing dams in water planning • Place sediment ponds, sediment traps, and litter traps above the flood line so that they do not discharge material during flooding or high rainfall events.

PSP Document	Response	Suggested improvements
Plan 7 Bushfire East of Aberline Precinct Structure Plan  	The BMO places tight restrictions on how roading, housing, and vegetation can be managed. This has not been properly attended to in the plan. Climate change within the life of the subdivision has not been considered in bushfire planning. The road network has not considered bushfire risk.	• • Recognise that bushfire weather is likely to increase with climate change. • Plan for future climate change so that green spaces don't get future pressure to be cleared because buildings are too close to them. E.g. have riparian conservation reserve along the Creek which meets the needs of the creek, then a public space area between that and the housing which has lower risk vegetation and provides for public access. Make this area larger than is currently required to accommodate future needs. • Move main access roads from Wangoom Rd so they are not immediately beside Tozer Reserve. CFA has

PSP Document	Response	Suggested improvements
		guidelines for management of vegetation beside access roads. Road should be far enough away from Tozer Reserve so that the vegetation does not need to be modified. See elsewhere in this submission for more detail.
Plan 8 Native Vegetation Retention & Removal East of Aberline Precinct Structure Plan  precinct boundary retention vegetation for growling grass frog recolonisation native vegetation to be retained (if practical to the satisfaction of the relevant authority) Plains Grassy Woodland (Tozer Reserve) Plains Grassy Woodland waterway & drainage within conservation (subject to 1% AEP) trees to be retained (if practical to the satisfaction of the relevant authority)	In this predominately cleared landscape, ALL vegetation whether it is native or introduced, has habitat value. Wildlife will use whatever is available for survival. Large trees are particularly valuable for nesting and roosting sites. Raptors require these large trees, and if they are absent will abandon the area. Statements such as ‘trees to be retained if practical’ are meaningless. Unless a concerted effort is made, it is much easier for a developer to start with a ‘clean slate’, and trees will be lost.	Retain all existing trees with appropriate buffers for their protection.
	In this predominately cleared landscape, ALL vegetation whether it is native or introduced, has habitat value. Wildlife will use whatever is available for survival. Large trees are particularly valuable for nesting and roosting sites. Raptors require these large trees, and if they are absent will abandon the area. Statements such as ‘trees to be retained if practical’ are meaningless. Unless a	Retain all existing trees with appropriate buffers for their protection.

PSP Document	Response	Suggested improvements
	concerted effort is made, it is much easier for a developer to start with a 'clean slate', and trees will be lost.	
	Growling Grass frog habitat proposal	Check if this vegetation still exists
3.4 Services and destinations 3.4.1 Objectives – Services and destinations		Additional objective – To facilitate spaces and movement corridors which allow for people to interact and meet naturally and develop neighbourhood relationships
		Additional objective – To provide spaces/destinations which provide cool and comfortable resting places during extreme heat events.
R39 Proposed government school sites must have a minimum of two road frontages (three preferred), one of which must be a bus-capable connector road. All roads fronting school sites must be wide enough to simultaneously accommodate safe and efficient:...	Supported	
3.5 Thriving local economies 3.5.1 Objectives– Thriving local economies		
G37 A masterplan should be prepared for subdivision that creates the designated activity centre site to show integration of built form, land use, access, and public realm. ... Encourage night-time activation through lighting, mixed uses, and adaptable spaces.	Lighting for human safety is important. Lighting which is wildlife sensitive is also important.	Ensure lighting design is wildlife sensitive so that fauna can use all habitat elements at night, e.g.:

PSP Document	Response	Suggested improvements
	Light pollution has a big negative effect on many nocturnal creatures including invertebrates and vertebrates. Wildlife habitat use can markedly decline due to inappropriate lighting.	• Layout • Lighting direction • Shading • Intensity • Frequency range • Sensors • The following references give some guidance: ○ National Light Pollution Guidelines for Wildlife • Include design guidelines for housing and support for residents to reduce the negative effects of night lighting on wildlife.
3.6 Infrastructure coordination 3.6.1 Objectives – Infrastructure coordination		•
O24 To encourage environmentally sustainable design and development and encourage the use of sustainable energy across the precinct. R30, R48, R50, R52	Supported, however only 70% of blocks are required to have good solar access.	• Ensure all blocks have good solar access • Identify areas for future community battery sites.
O25 To plan for an integrated water management system that reduces reliance on reticulated potable water, increases the re use of alternative water through stormwater harvesting and water recycling contributing towards a sustainable and green urban environment. R 37, R38, R53	Partly supported.	• Also need to ensure enough water enters the soil throughout the subdivision to support trees and other vegetation.
O27 To facilitate orderly, staged development that is resilient to climate-related hazards and responsive to environmental conditions. R43, R46, R54, R55, R57, R58, R59, R60, R61, PIP (Table 8), Plan 11	Supported.	• The current proposal: • Is not sufficiently staged to protect environmental values

PSP Document	Response	Suggested improvements
		- Is not sufficiently resilient to climate-related hazards, particularly fire risk, flood risk, and hot days. - The proposal fails to respond to the environmental significance of Tozer Reserve and the Water Reserve.
R51 Utilities and other infrastructure must not cross conservation areas and waterway corridors identified in Plan 5 Public Realm Plan and Plan 6 Water Plan. Where services cannot avoid crossing or being located within a conservation area or waterway corridor, they must be located to avoid disturbance to identified environmental values.	Supported.	- Local knowledge should be considered in planning. - The method of installation is also important, e.g. boring rather than excavation for utilities.
R52 The design and delivery of underground services must be coordinated, located, and bundled (using common trenching) to maintain the cross-section widths of paths and nature strips as shown in Plan 12 Precinct Infrastructure Plan and Appendix 5 and to facilitate trees and other planting within road reserve.	Supported	
R53 Utilities must be placed outside of conservation areas, natural waterway corridors or on the outer edges of these corridors in the first instance. Where services cannot avoid crossing or being located within a conservation area or natural waterway corridor, they must be located to avoid disturbance to existing waterway values, native vegetation, areas of strategic importance to Growling Grass Frog, to the satisfaction of the Department of Energy, Environment and Climate Action, and the responsible authority.	Supported	- Local knowledge should be considered in planning. - The method of installation is also important, e.g. boring rather than excavation for utilities.
R54 All new electricity supply infrastructure (excluding substations and cables with voltage 66kv or greater) must be provided underground.	Supported	Planning should also be in place for future community batteries.
R55 All public open space contributions via Clause 53.10 must be finished in accordance with the approved landscape masterplan and to a standard that satisfies the requirements of the responsible authority prior to the transfer of the public open space, including: • Removal of all existing and disused structures,	Partly supported. It is unnecessary and a waste of space to construct a 1.5-metre-wide pedestrian path around the perimeter of every reserve,	Create a path network within a reserve which provides good access, attractive

PSP Document	Response	Suggested improvements
foundations, pipelines, and stockpiles • Basic levelling including the supply and spread of minimum 75mm topsoil and subsoil if required on the proposed areas of open space to provide a stable free draining surface • Clearing of rubbish and weeds, levelled, topsoiled and grassed with warm climate grass (unless conservation reserve requirements dictate otherwise) • Provision of water tapping, potable and recycled water connection points • Planting of trees and shrubs (with drought tolerant species) • Adequate protection of existing trees that are to be retained including exclusion zones as appropriate • Provision of vehicular exclusion devices (fence, bollards, or other suitable method) • Bicycle parking facilities • Maintenance access points • Construction of minimum 1.5-metre-wide pedestrian paths around the perimeter of the reserve, connecting and linking into any other surrounding paths or points of interest, except where shown as a shared path on Plan 4 • Installation of boundary fencing where the public open space abuts private land • Installation of park furniture including barbeques, water fountains, shelters, furniture, rubbish bins, local scale playground equipment, local scale play areas, and appropriate paving to support these facilities, consistent with the type of public open space listed in the open space delivery guide and relevant open space strategies and landscape guidelines	particularly when there is a footpath on the opposite side of the road. Paths connecting and linking into any other surrounding paths or points of interest are desirable.	viewlines, and a range of movement experiences including sunny and shady. • Planting should include low species as well as trees and shrubs, for example native wildflower and grassland areas. • Mulch should be used to protect the roots zones of trees, retain water, and reduce the need for mowing (see Warrnambool Botanic Gardens for examples). • All plants used for landscaping should be indigenous to the local area or identified as non-invasive introduced species (e.g. Western Australian species are introduced in Warrnambool). This includes grass species. • Natural play areas should be included (see Warrnambool Botanic Gardens nature play space). • Hard landscaping windbreaks and shade for people may be necessary, particularly early in the life of the subdivision.

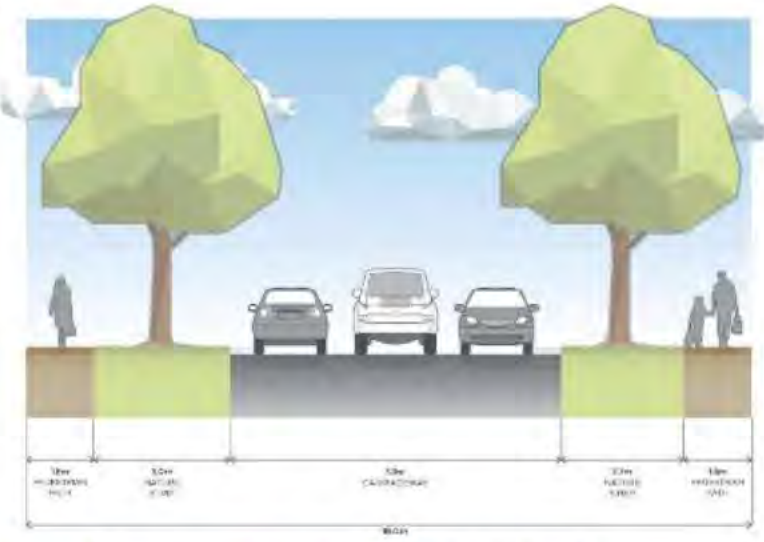
PSP Document	Response	Suggested improvements
R56 All open space areas including waterway corridors, utilities easements and any other encumbered open space must be constructed generally in accordance with the approved landscape masterplan.	Supported	The approved landscape masterplan needs to have local input.
R57 Stormwater runoff from any development must meet the performance objectives of the CSIRO Best Practice Environmental Management Guidelines for Urban Stormwater prior to discharge to receiving waterways and as outlined on Plan 6 Water Plan, unless otherwise approved by the responsible authority. Proposals that exceed the performance objectives are encouraged and will be considered to the satisfaction of the relevant authority. (T13, T14, T17)	Supported	Stormwater management and treatment should occur over all of the subdivision, not just at the retention ponds near the Creek.
R59 Planning applications must demonstrate how the subdivision and buildings or works will avoid and minimise impacts to conservation areas through consolidating utilities into dedicated service corridors.	Supported	
R60 Final designs and boundaries of constructed wetlands, retarding basins, stormwater quality treatment infrastructure, and associated paths, boardwalks, bridges, and planting, must be to the satisfaction the responsible authority.	Supported	These should also meet industry standards and reflect the local environment.
R61 Land identified as public land and required to be delivered as identified in a DCP or separate agreement must be vested in the relevant authority in the following condition: • Free from all existing disused structures, foundations, pipelines, stockpiles, rubbish, environmental weeds rocks and soil contamination • Reasonably graded and/or topsoiled to create a safe and regular surface with a maximum 1:6 gradient • Seeded and top-dressed with drought-resistant grass in bare, patchy and newly-graded areas • Removal of soil contamination.	Partly supported. Seeding and top-dressing with drought-resistant grass is undesirable if the public land is to be used for indigenous vegetation.	- The condition should be changed to: - Mulched, or seeded and top-dressed with grass species appropriate to future use (e.g. indigenous species for conservation areas).
R63 Before development commences on a property, functional layout plans of the road network must be submitted that illustrate the location of all: • Underground services • Driveways and crossovers • Intersection devices • Shared, pedestrian and bicycle paths • Street lights • Street trees A typical cross-section of each street must be submitted showing above-and-below ground placement of services, street lights and street trees. The plans and cross-sections (including long road cross sections) must demonstrate how services, driveways and street lights will be placed to achieve the required road reserve width and accommodate at least the minimum street tree planting requirements.	Supported	Street light design must follow guidelines of wildlife sensitive design.

PSP Document	Response	Suggested improvements
Functional, detailed design plans, and cross-sections must meet the requirements of the IDM to the satisfaction of the responsible authority and all relevant service authorities before development commences and may be approved in stages to the satisfaction of the responsible authority.		
G41 Development staging should have regard to: • Proximity to existing or proposed development fronts or serviced land Proximity to significant existing public transport infrastructure or public transport services • Proximity to stormwater detention and treatment infrastructure • Proximity to existing or committed community infrastructure, such as schools • Proximity to new or existing arterial or connector road infrastructure, inclusive of active transport. • Its role in facilitating delivery of the above infrastructure. Staging that meets alternative criteria to the above may be considered by the responsible authority where an applicant satisfactorily demonstrates that development will not be isolated from basic and essential infrastructure and services, as identified in Plan 12.	Supported	• Staging should also consider: • Effect on conservation values • Need to create a liveable area for the first residents including vegetation, shade, and recreational areas.
G42 Integrated water management systems should be designed to enable connection for the supply of treated stormwater for existing and future Growling Grass Frog wetlands.	Supported	• Also for other aquatic conservation values.
G43 The early delivery of community facilities, local parks and playgrounds is encouraged within each neighbourhood and may be delivered in stages, to the satisfaction of the responsible authority.	Supported	•
G44 To enable domestic electric vehicle charging, subdivisions of residential lots and residential developments should allow pre-wiring to support a 32 A Mode 3EVSE or alternative standard, to the satisfaction of the responsible authority.	Supported	• To ensure financial equity amongst residents, all lots should also have access to renewable energy through their own solar panels or other energy capture devices, or to a community battery with community generation of power. • This is particularly important for low income and high density housing.

PSP Document	Response	Suggested improvements
G45 Above-ground utilities (such as electricity substations, sewer pump stations, telecommunications facilities, and overhead powerlines) should be identified at the subdivision design stage to ensure effective integration with the surrounding neighbourhood. This includes meeting expectations for mobile telecommunications infrastructure under the Commonwealth's Telecommunication In New Developments (TIND) Policy. Land required to accommodate the infrastructure must not be counted as contributing to open space requirements specified under cl53.01.	Supported.	• Include community batteries.
G47 Where primary waterway, conservation or recreation functions are not adversely affected, land required for integrated water management initiatives (such as stormwater harvesting, aquifer storage and recovery, sewer mining) should be incorporated within the precinct open space system as depicted on Plan 5 Public Realm Plan.		• This needs to be done with extreme caution for conservation values.
Plan 11 Precinct Infrastructure Plan East of Aberline Precinct Structure Plan 		•

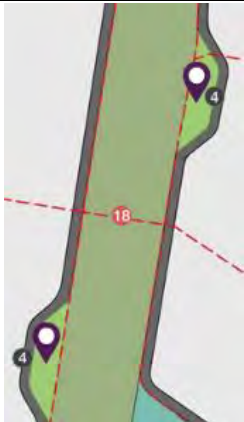
PSP Document	Response	Suggested improvements
	Local parks have been located adjacent to Tozer Reserve and to proposed main access roads. This is not appropriate for conservation, access, and safety reasons.	- Local parks should be located within the residential area, and away from main access roads to ensure the safety of pedestrians. - Local parks should be located within residential area, and away from Tozer Reserve to reduce disturbance to conservation values.
	Water retarding basins are located only at the bottom of the catchment, and adjacent to (or on) the flood plain of Russells Creek. Stormwater treatment should occur throughout the subdivision, not just at the 'bottom'. There is a risk of floodwaters scouring out the sediment of retarding basins and distributing it into Russells Creek, and then to the Merri River. Riparian buffers for Russells Creek are too narrow. The 43 Boiling Down Rd Water Reserve has been ignored in planning when it could become an important conservation and aesthetic area in the lower part of the subdivision.	- Integrate stormwater treatment throughout the subdivision to reduce the load, and necessity, for retarding basins on floodplains. - Use 100 m wide riparian buffers to provide excellent protection for the waterway. - Plan for the protection and restoration of the wetland/spring within the Water Reserve, including riparian vegetation, and a biolink to Russells Creek.

PSP Document	Response	Suggested improvements
Environmental Constraints East of Aberline Precinct Structure Plan 	A substantial area of the proposed subdivision has a high potential for contamination. This is deeply concerning at this stage of the proposal.	- Assess the actual contamination across the subject area before any more work is done on the potential subdivision. - Ensure contamination is dealt with, or if it cannot be treated, then those areas are isolated and set aside as biotreatment areas in the long-term.

PSP Document	Response	Suggested improvements
 Local Access Street Level 1 (16m)	The included plans do not describe whether hard or soft guttering will be used to allow water to soak into the ground. Some plans suggest that less than 3 m of soil is required for trees with proposed diameters of 6.4m. This may have been possible before climate change, but current evidence is that street trees are struggling more with drought and climate change. Both these reduce the resilience of trees, and their vulnerability to insect attack. Street and street vegetation planning needs to be transformational to recognise the different conditions which will occur within the life of the tree. Extreme storm events and winds are also more likely to break or uproot street trees, particularly if advanced stock is planted.	• Incorporate water retention throughout the subdivision to improve the survival of street trees and domestic gardens. • Be realistic about the eventual size of trees that are planted in areas with limited root room. Tree roots usually reach as far as the canopy. Restricting the roots will restrict the tree. Alternatively roots will grow and disrupt footpaths and other infrastructure. • Ensure tree species are chosen with due regard to climate change and drought effects e.g. species that are resilient <u>Without urgent action, these are the street trees unlikely to survive climate change</u> • Given the long time it takes to create a substantial tree canopy, plant a higher number of street trees
Plan 12 – Infrastructure and development staging	The plan includes two stages for development and three stages for drainage. Observation of other subdivisions in Warrnambool shows that developers	• Have a much finer scale of staging to ensure that large areas are not bared off. • Suggest 8-10 stages where clearing, infrastructure, and

PSP Document	Response	Suggested improvements
	tend to clear vast areas at once and leave it bare. There is then a large amount of sediment movement towards the waterways, and loss of topsoil. Paddocks are not a biological desert. They support an abundance of insects and other small life, and also vertebrate fauna like lizards and birds feeding. Complete baring of the soil degrades the area markedly.	regressing (or other soil surface management like mulching) is used to conserve soil on the site and prevent erosion and sediment movement into waterways. The goal should be to PREVENT soil movement, not catch it at the bottom of the slope. • Stage development so that vegetation and habitat areas are developed on an ongoing basis to provide continuity for fauna using the development area.

Statement in Landscape Strategy report	Response	Suggested improvements
 Tozer Reserve is retained as a place for conservation and education. Its environmental value will be enhanced by the addition of open space strung along Russell Creek, which will form a substantial biolink (refer Flora and Fauna Assessment: Aberline to Horne Growth Corridor, 2018). The interface roads along the west and east will be hard edges to aid weed control within Tozer Reserve. Planted vegetation within these 'control lines' should be consistent with the values and ambitions of Tozer Reserve. Shared paths running the length of Tozer Reserve, in the interface road reserve, will allow Tozer Reserve to function as a linear corridor and contribute to the recreational value of the precinct. One point of access through the reserve, for pedestrians and cyclists, is provided at a location that would necessitate the minimum amount of vegetation removal. The connection will be an important link between otherwise segregated neighbourhoods. Two local level parks/ play spaces are sited next to	Tozer Reserve is not 'open space'. It is a conservation area. The biolink proposed for Russell Creek is relatively narrow and interrupted by multiple uses. For it to function as an effective biolink it needs to be wider and undisturbed by other uses. Roads immediately adjacent to Tozer Reserve are highly undesirable. They would create a number of risks as previously described. Paths should not be placed on the Reserve side of the roads. This would encourage people and dogs to move into the Reserve. The Reserve cannot cope with over 11,000 people wanting to walk in it. Parks and playspaces adjacent to the Reserve are highly undesirable as	Update report to be consistent with current understandings (report is seven years old)

Tozer Reserve with the intention that the facilities complement each other.	they will degrade the conservation values of the Reserve.	
4. Proposed local level park with play space adjoining Conservation Reserve 	Play spaces adjacent to Tozer Reserve are highly undesirable due to disturbance to the conservation values.	• Keep play spaces away from Tozer Reserve. • Provide adequate natural play spaces elsewhere in the subdivision to reduce pressure upon Tozer Reserve.
4 Proposed Open Space Coverage  East west path in reserve.	The plan shows an east-west path through Tozer Reserve. This is highly undesirable. The plan shows paths immediately adjacent to Tozer Reserve, this is also highly undesirable.	• Good options for protecting Tozer Reserve are described elsewhere in this submission.

06 DRAINAGE RESERVES With all drainage reserves abutting passive and active open space reserves, shaping of the wetland/ retardation basins needs to ensure high amenity. The size of the reserves shown in the Stormwater Management Report, 2018 may need to be increased slightly to ensure the amenity of the adjacent open spaces isn't negatively impacted. Recommendations: • For the wetlands/ retardations basins 1,2,3 and 5, utilise the existing slope towards Russell Creek • Limit the grade of all exposed batters to a maximum of 1:6 so they don't look obviously unnatural and to encourage good plant coverage • Where possible Include islands, peninsulas or a series of water bodies that can be planted to achieve a more natural look • Use a combination of cut and fill to achieve a more natural look • Limit the amount of fill in any one location to minimise the likelihood of views being blocked		• Water retardation should occur throughout the subdivision, not just at the bottom. • Construct sediment management works very early in the subdivision process to reduce sediment flow towards Russells Creek. • The first sediment pond (where sediment is regularly dug out) should not be within the flood plain of Russells Creek. • Islands and peninsulas don't make wetlands look more 'natural'. • The shape, slope, and vegetation of wetlands should mirror natural riverine wetlands and floodplains of Russells Creek and Merri River. This will make them look more natural. • Establishment of an impermeable base to the wetland takes knowledge, skill, and time. Ensure wetlands are construction is supervised by ecologists to ensure they have good natural values.
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Comments on **East-of-Aberline-PSP-Aberline-to-Horne-Growth-Corridor-Landscape-and-Viewshed-Assessment-Spiire-January-2018**

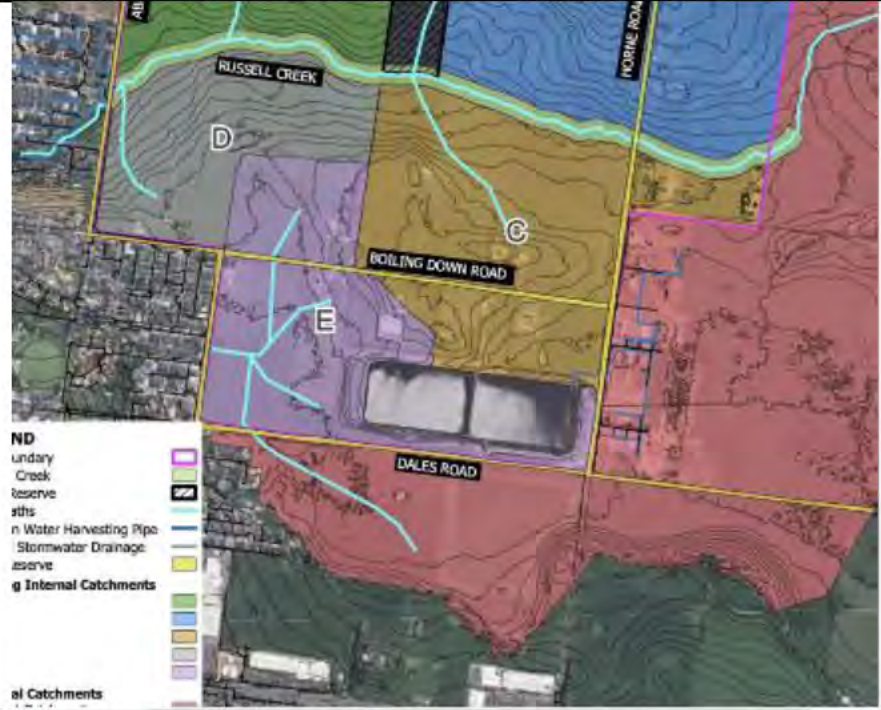
[East-of-Aberline-PSP-Aberline-to-Horne-Growth-Corridor-Landscape-and-Viewshed-Assessment-Spiire-January-2018.pdf](#)

Statement in Landscape report	Response	Suggested improvements
1.3 ASSUMPTIONS AND LIMITATIONS A number of assumptions have been made for this assessment. These include: ☐ The report is based on the information available for the project at the time of writing, January 2018. ☐ Baseline conditions were confirmed in the field during the site survey. ☐ Viewing locations were chosen based on the desktop study. Recording of views was undertaken from the nearest publically accessible area. ☐ The Zone of Theoretical Visibility (ZTV) does not consider proposed built form which was unknown at the time of writing this report. There are also limitations associated with the assessment. These include: ☐ There is no guidance on the assessment of landscape and visual effects specific to Australia. Therefore, United Kingdom (UK) publications have been referenced where relevant for LVIA. • ☐ The assessment process aims to be objective and describe any changes factually. Assessment requires qualitative (subjective) judgements to be made. The conclusions to this assessment therefore combine objective measurement and professional interpretation.	Much has changed since January 2018. This was: • Before Covid-19 and associated increases in mental health concerns about social isolation and isolation from natural places • Before the escalation of the climate crisis • Before the escalation of biodiversity collapse • Before the housing crisis	• Planning for landscape needs to consider all our new understandings and awarenesses of the situation we are living in, and what is projected to happen in the future.
Clause 12 Environmental and Landscape Values An overall objective of Clause 12 aims to "...conserve areas with identified environmental and landscape values." Further, that "Planning should protect sites and features of nature conservation, biodiversity, geological or landscape value." Clause 12.01-1 Protection of Biodiversity ☐ To assist the protection and conservation of Victoria's biodiversity, including important habitat for Victoria's flora and fauna and other strategically valuable biodiversity sites. Clause 12.01-2 Native Vegetation Management ☐ To ensure that permitted clearing of native vegetation results in no net loss in the contribution made by native vegetation to Victoria's biodiversity.	Retain natural drainage corridors with vegetated buffer zones at least 30m wide along each side of a waterway to maintain the natural drainage function, stream habitat and wildlife corridors and landscape values	• Research shows that buffers much larger than 30 m are required for protection of riparian values, and that these buffers should not be multi-use. • 'Buffer creep' also needs to be considered in planning. • These ideas are described in detail elsewhere in this submission.

Clause 12.04-2 Landscapes ☐ To protect landscapes and significant open spaces that contribute to character, identity and sustainable environments. Clause 14 Natural Resource Management 14.02-1 Catchment planning and management ☐ Retain natural drainage corridors with vegetated buffer zones at least 30m wide along each side of a waterway to maintain the natural drainage function, stream habitat and wildlife corridors and landscape values, to minimise erosion of stream banks and verges and to reduce polluted surface runoff from adjacent land uses.		
Clause 15 Built Environment and Heritage Clause 15 aims to ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, protecting places and sites with significant heritage, architectural, aesthetic, scientific and cultural value. Clause 15.01-1 Urban Design ☐ To create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity. Clause 15.01-2 Urban Design Principles ☐ To achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties. The following are relevant urban design principles: – Landmarks, views and vistas: should be protected and enhanced or, where appropriate, created by new additions to the built environment. – Landscape architecture: Recognition should be given to the setting in which buildings are designed and the integrating role of landscape architecture.	Tozer Reserve is a place of significant heritage, aesthetic, scientific, and cultural value.	• The story of Tozer Reserve's conservation restoration is remarkable. Indigenous plants survived for decades beneath the pine plantation, and then regenerated when the pines were removed. • At a time when climate change will require resilience and transformation from us all, the Tozer Reserve story is increasingly relevant.
Clause 21.03 Environment and Landscape Values Clause 21.03-1 Biodiversity ☐ To recognise, protect and enhance the natural environment and habitats. Clause 21.03-2 Native vegetation management ☐ The Francis Tozer Reserve located on Wangoom Road, Warrnambool, is recognised as an important example of remnant native grassland and should be preserved as a community education resource. – Objective 1: To ensure development recognises, protects and enhances native vegetation values. Clause 21.03-4 Significant environments and landscapes ☐ Warrnambool contains areas of great natural beauty. The community values the city's landscape character. The ocean, the Merri River, the	Tozer Reserve conservation values need to be conserved so it can be used for education.	• Continued use of the Reserve for education relies on improved conservation of the Reserve values in the face of being surrounded by a subdivision and over 11,000 new residents. • This will take careful planning and ongoing work.

Hopkins River, inland hilltops and ridgelines, and surrounding rural areas can be viewed from numerous public areas and private dwellings throughout the city. Respect for the sharing of views, rather than necessarily the retention of all existing views, is an important issue. ... □ The natural landscape is an important asset of the municipality that requires protection from inappropriate use and development. – Objective 1: To protect the natural, cultural and visual values of significant natural environments. ...		
Clause 21.04 Environmental Risks ABERLINE TO HORNE GROWTH CORRIDOR LANDSCAPE AND VIEWSHED ASSESSMENT 17 Clause 21.04-2 Floodplains □ Objective 2: To maintain the integrity of the Merri River and Russell Creek floodplains. Clause 21.05 Natural Resource Management Clause 21.05-2 Water □ The environmental values of Russell Creek could be enhanced both in terms of the riparian vegetation, in stream rehabilitation and improved stormwater quality. – Objective 1: To maintain and enhance the ecological health of Warrnambool's water resources and waterways.	Supported	• Given the highly degraded state of Russells Creek and its catchment, substantial works will be required to improve its ecological health. • The health of the creek requires excellent management of stormwater within its catchment, including throughout the subdivision. This is described elsewhere in this submission.
4.2.3 4.2.4 4.2.5 RECREATION FACILITIES Figure 1 illustrates existing recreational facilities within and surrounding the Study Area. Tozer Memorial Reserve is a recreational facility central to the site. It is a well-known local destination, used for walking, nature appreciation, bike riding and community education. It is approximately 20ha in size and offers a number of physical facilities including gravel access tracks, signage indicating educational and historical information, walking tracks and a shelter for community use including a self-composting toilet and water. Currently the reserve is an outdoor education facility where members of the public can learn about biodiversity conservation, cultural heritage and community involvement. The reserve is currently managed jointly by the Tozer Reserve Committee of Management, Warrnambool Primary School and Warrnambool and Brauer colleges. Basalt to Bay Landcare Network has played a role in supporting on ground projects.	Tozer Reserve is not a recreational facility. It cannot service a subdivision of over 11,000 people without extreme damage to the important conservation values.	• Provide substantial buffers for the Reserve (100 m either side) as described elsewhere in this submission. • Actively discourage direct access to the Reserve from the subdivision • Create alternative natural areas for residents to use to reduce the pressure on Tozer Reserve. • Create clear messaging about the value and purpose of Tozer Reserve.

Statement in PSP - Background Report Draft report	Response	Suggested improvements
Figure 14 Existing catchment conditions (Source: Stormwater Drainage Concept Design and Integrated Water Management Draft Report, Spiire 2022) 	The site is not a ‘blank slate’. There are also many features of topography and drainage which are not properly considered in the documentation.	• Ensure the topography and hydrology of the site is respected during planning and implementation, rather than being ‘bulldozed’ into compliance with human desires.

Statement in PSP - Background Report Draft report	Response	Suggested improvements
		
Table 3 Example density model table Public Open Space Contribution 5% of total site area = 1.00 ha	5% is a minimal contribution to open space. In Melbourne public space contributions are 10%. The presence of Tozer Reserve and Russells Creek are not a substitute for an effective public space contribution. The conservation values need their own space, without	• Increase public space contribution to at least 10%

Statement in PSP - Background Report Draft report	Response	Suggested improvements
	disturbance from over 11,000 people.	
p.68 To ensure pedestrian and cycling networks are well connected and purposeful, the precinct will include: • Off-road shared paths on all connector roads, providing continuous access to schools, the neighbourhood activity centre, civic and community facilities, open spaces, and the Russells Creek corridor. • A shared off-road path along Russells Creek and Tozer Reserve, providing recreational and commuter connections through the precinct and linking to surrounding green corridors. • Footpaths on both sides of all local access streets where development occurs on both sides, supporting safe and convenient walking for all users.	Supported in part. The bike paths should not impinge upon conservation zones or buffer zones.	• Ensure pathways do not impinge upon conservation or buffer zones.
p.74 T11 The open space network should seek to meet the following minimum targets: • Within residential areas (including activity centres): o 10% of net developable area for local parks and sports field reserves. o 3-5% of net developable area set aside for local parks. o 5-7% of net developable area set aside for sports field reserves. • Within dedicated employment and/ or economic activity areas, 2% of the net developable area for local parks. Regional Specific Adaptation	Supported.	• Some local parks should be located adjacent to schools, shops, and other places of human connection to facilitate '3rd space' community meeting and building e.g. places to have coffee.
T12 Open space and sports reserves should be located to meet the following distribution targets: • A sports reserve or open space larger than 1 hectare within an 800m safe walkable distance of each dwelling • A local park within a 400m safe walkable distance of each dwelling. Regional Specific Adaptation	Supported.	• Local parks need to have hard and soft landscaping which make them attractive destinations
T13 Potential canopy tree coverage within the public realm and open space should be a minimum of 30% (excluding areas dedicated to biodiversity or native vegetation conservation). Achieve via PSP requirement	Supported with modifications. Potential canopy tree coverage should be higher than 30%. It will take many years for trees to reach their maximum size (at least 20-25 years). In the meantime, the development will be stark	• Plant IN EXCESS of 30% cover to: • Increase cover in the short term while trees are growing • Give opportunity for higher long term cover as climate change is likely to get worse given the lack of progress towards targets

Statement in PSP - Background Report Draft report	Response	Suggested improvements
	and hot, especially in summer.	Climate change (drought, extreme winds) are likely to negatively affect street trees, so planting extra trees will hopefully compensate for losses.
T14 All streets containing canopy trees should use stormwater to service their watering needs. Achieve via PSP requirement	Supported.	- The design of drainage is important in ensuring that water is retained within the soil of the subdivision, not directed downhill towards Russell Creek. - The long-term survival of street and park trees will require adequate quantity and quality of water. - Use of Water Sensitive Urban Design is highly recommended, particularly the use of swales and 'across the slope' streets to absorb water into the soil.
T15 Design of the street network should be capable of supporting at least 70% of lots with a good solar orientation. Achieve via PSP requirement	100% of lots should have good solar access. Renewable energy will be essential, including for charging electric cars.	100% of lots should have good solar access - This is particularly important for low income housing. - There should also be recommendations for all housing to have renewable energy generation on site.

Statement in PSP - Background Report Draft report	Response	Suggested improvements
T16 All conservation areas identified in relevant Commonwealth, state and local government strategies should be retained in accordance with relevant legislation. Achieve via PSP requirement	Supported.	Tozer Reserve, 43 Boiling Down Rd Water Reserve, and Russells Creek riparian area all need protection via zoning as conservation reserves (NOT PPRZ).
5.5.1 Precinct conservation strategy		
Native vegetation is primarily confined to Tozer Reserve and scattered roadside or paddock remnants.	This is the current condition	- A goal should be set to increase the coverage of indigenous vegetation within the development boundaries. - This goal is not the same as 'open space' or 'canopy cover'. 20% indigenous vegetation cover including river buffers, Tozer Reserve, and the Water Reserve is not unreasonable.
Given the degraded nature of the wider study area and the concentration of ecological values in specific corridors, a precinct-wide approach is required to ensure these values are retained and enhanced. Tozer Reserve and the Russells Creek corridor should be prioritised for protection, not only for biodiversity outcomes, but also for their contribution to future landscape connectivity and amenity within the precinct.	Supported.	- As previous. - A measurable and enforceable goal rather than vague statements is more likely to get on ground action.
As native vegetation is generally restricted to contained areas such as Tozer Reserve and minor, scattered, low-quality roadside vegetation, it is recommended that a Native Vegetation Precinct Plan (NVPP) is not required. Instead, applications for native vegetation removal should be managed through the standard permit process under Clause 52.17 of the Warrnambool Planning Scheme.		No native vegetation should be removed from Tozer Reserve as part of

Statement in PSP - Background Report Draft report	Response	Suggested improvements
		this subdivision, instead substantial buffers of 100 m of native vegetation should be established on the western and eastern boundaries of the Reserve. • A high priority should be placed on conserving both native and introduced trees.
Biosis Pty Ltd was engaged to prepare a Growling Grass Frog Conservation Strategy for the precinct. Targeted surveys were conducted in December 2024 and March 2025, confirming no Growling Grass Frog were recorded in Russells Creek corridor, ephemeral wetlands within Tozer Reserve and existing farm dams on Crown Land and private agricultural land within the precinct. The strategy highlights the importance of wetland corridors and engineered wetlands for maintaining habitat function and connectivity. Key threats identified include altered hydrology, urban runoff, and fragmentation. These findings reinforce the need to protect and enhance wetland chains and natural creeklines such as Russells Creek, that are consistent with the broader ecological recommendations in the EHP assessment. This supports DEECA's emphasis on strategic planning responses and the value of constructed wetlands for GGF conservation.	Surveys were conducted during a drought period when paddocks were extremely dry. Wetlands and drainage lines exist beyond Russells Creek	• See elsewhere for 43 Boiling Down Rd water reserve and other drainage lines and wetlands identified on historical maps. • These should all be restored as part of the proposed development.
Arboricultural Assessment ... recommended prioritising the retention of medium Arboricultural Retention Value (ARV) trees, which offer the highest structural and environmental value within the urban landscape. These trees can deliver immediate canopy cover and long-term landscape contribution.	Supported.	•

Statement in PSP - Background Report Draft report	Response	Suggested improvements
Table 6 Nationally and state significant flora and fauna likely found in East of Aberline State Significant Flora - Swamp Flax-lily, <i>Dianella callicarpa</i> - Golden Cowslips, <i>Oxalis bahnii</i> - Annual Fireweed, <i>Senecio glomeratus</i> subsp. <i>longifructus</i> Black Wattle, <i>Acacia meunieri</i> - ('Protected under restricted use' under the Flora and Fauna (FFG) Act) State Significant Fauna - Blue-billed Duck, <i>Oxyura australis</i> - Freckled Duck, <i>Stictometta naevosa</i> - Musk Duck, <i>Biziura lobata</i> - Southern Toadlet, <i>Pseudophryne semimarmorata</i> - Glossy Grass Skink, <i>Pseudonotia lawlessi</i> Nationally Significant Fauna - Growling Grass Frog, <i>Litoria raniformis major</i> - Swamp Skink, <i>Lissolepis coventryi</i> - Grey-headed Flying-fox, <i>Pteropus poliocephalus</i> - Southern Bent-wing Bat, <i>Miniopterus euanthae bassanii</i>		This list should be updated based on local knowledge.
p.76 The VPA has worked closely with DEECA to address natural environment and biodiversity outcomes for the East of Aberline PSP. A comprehensive package of ecological and conservation strategy work has been undertaken in response to DEECA's agency validation comments. The final feedback provided by DEECA's Natural Environment Programs (NEP) team in July 2025 confirms that the PSP's approach is appropriate and well aligned with state policy and ecological design standards. DEECA has provided in-principle support to the refined Place-Based Plan and associated PSP requirements. DEECA considers the Growling Grass Frog Conservation Strategy (Biosis 2025) and Targeted Fauna Survey Report (TactEcol 2025) to be fit for purpose. While some seasonal limitations were acknowledged, the methods used align with DEECA guidance, and the findings are considered sufficient to inform the PSP. DEECA supports the VPA's use of this evidence to inform precinct-wide ecological and design responses.	DEECA's team are severely underresourced following government cutbacks. It is not clear whether local DEECA staff or people from other areas did the comments. People from elsewhere would not recognise the conservation values of the site.	Ensure that local knowledge is included in assessing the appropriateness of the PSP
Strengthened conservation corridors and habitat protection : DEECA supports the application of a 30-metre conservation corridor on both sides of Russells Creek, acknowledging that the additional alignment of open space and retarding basins achieves a functional minimum riparian width of 35 metres. This design reduces the residential interface and increases ecological protection. Tozer	DEECA supports 30m. This is wider than the 20 m recommended in the ecological report, but	Increase riparian buffers to 100m.

Statement in PSP - Background Report Draft report	Response	Suggested improvements
Reserve is formally identified as part of the Russells Creek and Tozer Reserve Conservation Corridor under the PSP with an appropriate vegetation buffer, and an additional conservation area north-east of the reserve addresses known and potential Growling Grass Frog habitat. These changes directly respond to DEECA's previous concerns and are strongly supported.	much narrower than relevant experts recommend. Also note that 'open space and retarding basins' do not necessarily contribute to functional riparian width, as per documentation provided elsewhere in this submission.	- Ensure public access areas are beyond this 100 m buffer. - Retarding basins have a primary function of cleaning up water, and may have secondary values for conservation. Their location on the floodplain is of concern (see elsewhere in this submission).
Subdivision design and ecological integration : DEECA supports the requirement for conservation masterplans on each section of the corridor, environmental management plans, and habitat-sensitive subdivision design for land adjoining Russells Creek and Tozer Reserve. This ensures implementation of the Growling Grass Frog Habitat Design Standards (DELWP 2017). DEECA also supports the broader requirement for all subdivisions on land containing or adjoining native vegetation and key habitat corridors (including Parcel EA-39) to retain vegetation, implement WSUD and preserve ponds, ensuring consistent habitat links.	Supported.	Ensure local knowledge is considered in design of subdivision.
Zoning and future land use protection: While VPA noted constraints in applying a public zone to privately owned land, DEECA has clarified that Public Conservation and Resource Zone (PCRZ) or Public Park and Recreation Zone (PPRZ) may be appropriate, particularly where land contributes to Growling Grass Frog habitat or supports ecological connectivity. VPA acknowledges this position and has applied the PPRZ to land identified for conservation in the PSP.	Not supported.	- PPRZ is not an appropriate zoning for conservation areas as it suggests recreation is a goal for the area. - The zoning for Tozer Reserve should be Conservation and Education only.
Waterway and drainage integration The PSP shows the Russells Creek waterway within a conservation area (30m from creek centreline). DEECA supports the incorporation of habitat-friendly retarding basins and open space within the creek corridor, provided they are designed in line with DELWP (2017) habitat standards.	Retarding basins are not appropriate on the flood plain. If a flood occurs flood water will run	Ensure WSUD applied across the entire site, so water is retained in soils for plant use, and

Statement in PSP - Background Report Draft report	Response	Suggested improvements
	through the basins and scour out the sediment which they have been designed to retain. The first in a sequence of basins is also regularly 'cleaned out' reducing its potential value for conservation. Water Sensitive Urban design should apply across the entire subdivision state so that water is slowed down across the entire site, not just before it hits the Creek. Subdivisions on the north side of the Merri River (off Wollaston Rd) show appalling sediment movement.	sediment is retained throughout the subdivision.
Bushfire planning interface The updated Bushfire Assessment (June 2025) introduces refined setback distances of 33–41 metres from Tozer Reserve and 19–21 metres from Russells Creek. DEECA supports these changes as they appropriately balance fire safety and ecological protection, ensuring compatible interface management with conservation areas. Associated PSP requirements ensure vegetation within bushfire hazard areas is managed to reduce risk while maintaining ecological function where appropriate.	The current design maps do not show the recommended setback from Tozer Reserve. Bushfire conditions are likely to worsen with climate change. During the life of the subdivision, it is likely fire conditions will become	- Design bushfire setbacks so they are wider than recommended to accommodate increased fire risk (due to climate change) during the life of the subdivision. - Elsewhere in this submission there is discussion of buffers that

Statement in PSP - Background Report Draft report	Response	Suggested improvements
	worse, and there will be more pressure to clear existing vegetation. Buffers should therefore be wider than recommended.	accommodate bushfire and other concerns by using native wildflower and grassland buffers.
Open space and canopy cover The arboricultural assessment suggested the retention of medium ARV trees across the precinct which is not a standard practice under the PSP guidelines. The VPA has carefully assessed the suggestion in conjunction with the need for deliver early canopy outcomes and public amenity and DEECA's comments on retaining native trees for biolink. The PSP requires the retention of existing native trees and incorporate 30% canopy cover target and street tree planting standards. These measures are complemented by the requirement for consistent open space design, including habitat-sensitive landscape planning adjacent to conservation areas.	Supported	• New plantings should be completed as early as possible, and at a greater than required density to increase short-term canopy cover and allow for future losses due to extreme weather events and drought.
5.5.2 Open space provision Planning assessment The Community Infrastructure Needs Assessment recommends 3–5% of the Net Developable Area (NDA) be allocated to unencumbered passive open space, equating to approximately 8.1 to 13.5 hectares within the precinct. High-quality design is essential, with features such as inclusive play areas, shaded seating, BBQ facilities, and pathways to support diverse users. The report identifies Russells Creek as a key opportunity for integrating linear open space with informal recreation and conservation outcomes.	In Melbourne this is 10%. The subdivision proposes over 11,000 people (four times the population of Port Fairy) live in this area. This will place an enormous pressure on Tozer Reserve as the only treed area. Park development should be an absolute priority to reduce the pressure on Tozer Reserve and its conservation values.	• Prioritise park development over other development in the sequence of subdivision. • Locate some parks near other amenities (e.g. schools, shops) so that people have places they can connect. • See example below

Statement in PSP - Background Report Draft report	Response	Suggested improvements
	Image at left is Lake Gardens housing development, Ballarat. Work began in 2000 (Lake Gardens, Victoria - Wikipedia) This shows how a parkland area is located adjacent to a retail location. This allows residents to perhaps buy a coffee, then sit or walk through parkland nearby while kids can play.	
The Russells Creek Civic Precinct's adjacency to Russells Creek also enables the integration of shared paths, nature-based recreation and linear parkland connecting to existing and future residential areas via green links. Its co-location with the proposed government school enhances opportunities for shared use of facilities and supports the creation of a consolidated community hub. The site's position addresses spatial equity within the PSP by locating a major facility in an area where there is room for multi-use development, while also avoiding the environmental and topographical constraints associated with the central Tozer Reserve.	Supported.	
While the designated local parks cannot provide the quantum requirement under T11, meeting Target T11 will be underpinned by Clause 53.01 of the Warrnambool Planning Scheme, which requires new residential developments to make a 5% public open space contribution. This	Unacceptable. To protect the values of Tozer Reserve more (not	• Increase the area of public parks and ensure their location, design, and early

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contribution may be provided as land (credited open space), a cash-in-lieu payment, or a combination of both, depending on the location and context of each development site.	less) local parks are required.	implementation reduce the visitor pressure on Tozer Reserve.																													
Table 7 Open space targets and precinct application <table><tr><th rowspan="2">Credited open space</th><th colspan="2">Quantum (% and min. ha)</th><th colspan="2">Distribution</th></tr><tr><th>Target</th><th>Place based Plan</th><th>Target</th><th>Precinct application</th></tr><tr><td>Local parks / passive open space)</td><td>3-5% 8.1ha</td><td>3.81% (NDHA) via Clause 58.01 POS contribution</td><td>95% of dwellings within 400m of a local park</td><td>98% of dwellings within 400m of a local park</td></tr><tr><td>Active open space / sports reserves</td><td>5-7% 13.5ha</td><td>3.96% (NDHA) 10.65ha</td><td>100% of dwellings within 800m of a sports reserve</td><td>97% of dwellings are within 800m of a sports reserve</td></tr><tr><td></td><td></td><td></td><td></td><td>100% of dwellings will be connected to the active open space via principal pedestrian network</td></tr><tr><td>All open space</td><td>1% 27ha</td><td>~8% (NDHA) 20.91ha</td><td>NA</td><td>100% of dwellings are within an open space catchment.</td></tr></table>	Credited open space	Quantum (% and min. ha)		Distribution		Target	Place based Plan	Target	Precinct application	Local parks / passive open space)	3-5% 8.1ha	3.81% (NDHA) via Clause 58.01 POS contribution	95% of dwellings within 400m of a local park	98% of dwellings within 400m of a local park	Active open space / sports reserves	5-7% 13.5ha	3.96% (NDHA) 10.65ha	100% of dwellings within 800m of a sports reserve	97% of dwellings are within 800m of a sports reserve					100% of dwellings will be connected to the active open space via principal pedestrian network	All open space	1% 27ha	~8% (NDHA) 20.91ha	NA	100% of dwellings are within an open space catchment.		Ensure parks are located and designed to draw people away from Tozer Reserve by being more accessible and attractive.
Credited open space		Quantum (% and min. ha)		Distribution																											
	Target	Place based Plan	Target	Precinct application																											
Local parks / passive open space)	3-5% 8.1ha	3.81% (NDHA) via Clause 58.01 POS contribution	95% of dwellings within 400m of a local park	98% of dwellings within 400m of a local park																											
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All open space	1% 27ha	~8% (NDHA) 20.91ha	NA	100% of dwellings are within an open space catchment.																											
5.5.3 Green streets and spaces																															
Planning assessment The PSP Guidelines stipulate a 30% canopy coverage across all PSPs and allow this coverage to include trees located in passive open space and road reserves.	Canopy coverage should be greater than 30%	See previous																													
5.5.4 Climate resilience statement Climate resilience is a key priority for the East of Aberline precinct, with DTP and Warrnambool City Council committed to addressing the region's changing climate through urban planning. The Barwon South-West region is projected to experience warmer, drier conditions with more extreme weather, including increased temperatures, longer fire seasons, and more intense rainfall events. Warrnambool City Council's Green Warrnambool strategy and Warrnambool 2040 plan outline goals for zero net emissions, climate adaptation, and a nature-integrated city. In collaboration with	The current PSP provides minimal recognition of climate change, and no recognition of biodiversity loss as worldwide phenomena.	See multiple suggestions in this submission to improve the climate resilience of the proposed subdivision.																													

Statement in PSP - Background Report Draft report	Response	Suggested improvements
Council, Hip v Hype prepared a Zero Net Carbon Development Opportunities & Feasibility Report to identify practical mechanisms for sustainable and low-carbon development. Several recommendations from this report have been incorporated into the PSP as guidelines to support long-term environmental resilience.	There is no innovation or transformational design included.	
Strong connections will be established to key destinations such as activity centres, community facilities, schools, and open spaces within the precinct, all of which support low-carbon transport opportunities.	Supported, but how will it be implemented?	Clearly state how these 'strong connections' will be made.
The East of Aberline precinct will support a 30% tree canopy target to limit the urban heat island effect and make the future community more resilient to increased temperatures.	Disagree. The small lot sizes, high housing density and extensive paving will make this place a hot box.	See multiple suggestions in this submission to improve the liveability of the proposed subdivision.
All vegetation within the Russells Creek and Tozer Reserve Conservation Corridor is planned to be retained which will also support recolonisation of significant flora and fauna. Providing an ecologically diverse landscape supports resilience for remnant native vegetation.	Disagree. There is minimal vegetation along Russells Creek so this isn't much of a contribution. The proposed subdivision will have a huge negative effect on Tozer Reserve. Substantial accommodations need to be made to protect the flora and fauna values of Tozer Reserve.	- Much more work needs to be done for this to be an ecologically diverse landscape that supports resilience for remnant native vegetation. - Tokenistic statements and 'multi-use' areas are not adequate. - See comments elsewhere in this submission.
A reserve will be established along Russells Creek, which will be revegetated and likely include classified vegetation that will consider a setback buffer from bushfire hazards.	Grammar is confusing. Revegetation is likely to be considered a bushfire hazard once it is established. A further setback will be required.	Amend this statement to reflect the reality.

Statement in PSP - Background Report Draft report	Response	Suggested improvements
Figure 22 Existing flood conditions - 1% AEP (1-in-100 year) flood	Doesn't include the water reserve or wetlands in Tozer. Doesn't consider wetlands north of Wangoom Rd.	• Update the flood modelling to consider the 43 Boiling Down Rd Water Reserve, the wetland and headwaters of Russells Creek, and the Tozer Creek wetlands. • See historical mapping in Appendix 1.
5.5.7 Bushfire hazard areas Designate local parks, active open space, conservation and drainage reserves along Russells Creek (Grassland) – future lands to be managed by the Warrnambool City Council as low threat vegetation. Apply PSP requirements to designate bushfire setback(s) for new developments (BAL12.5) including perimeter road, vegetation management buffer and residential lot setback to the bushfire hazard areas including Tozer Reserve.	Designating conservation and drainage reserves along Russells Creek as grassland is not consistent with recommendations that it be revegetated for conservation purposes.	• Recognise that riparian areas of Russells Creek will have a bushfire risk if they are revegetated for conservation purposes. • Recognise the need for additional setbacks for bushfire zoning.
5.7 Infrastructure co-ordination 5.7.1 Staging and location of development	Experience of the subdivisions between Wollaston Road and the Merri River shows that developers tend to completely bare off a site, exposing soil and creating erosion. This is highly undesirable. At those sites, water retention basins were also constructed very late in the subdivision so that sediment flowed and blew into the Merri River.	• Staging of the subdivision is extremely important for conserving the values of Tozer Reserve, Russells Creek, and the Water Reserve. • Specify that sediment treatment and water slowing infrastructure be installed throughout the development (not just at the bottom), and be completed very early in the development so that

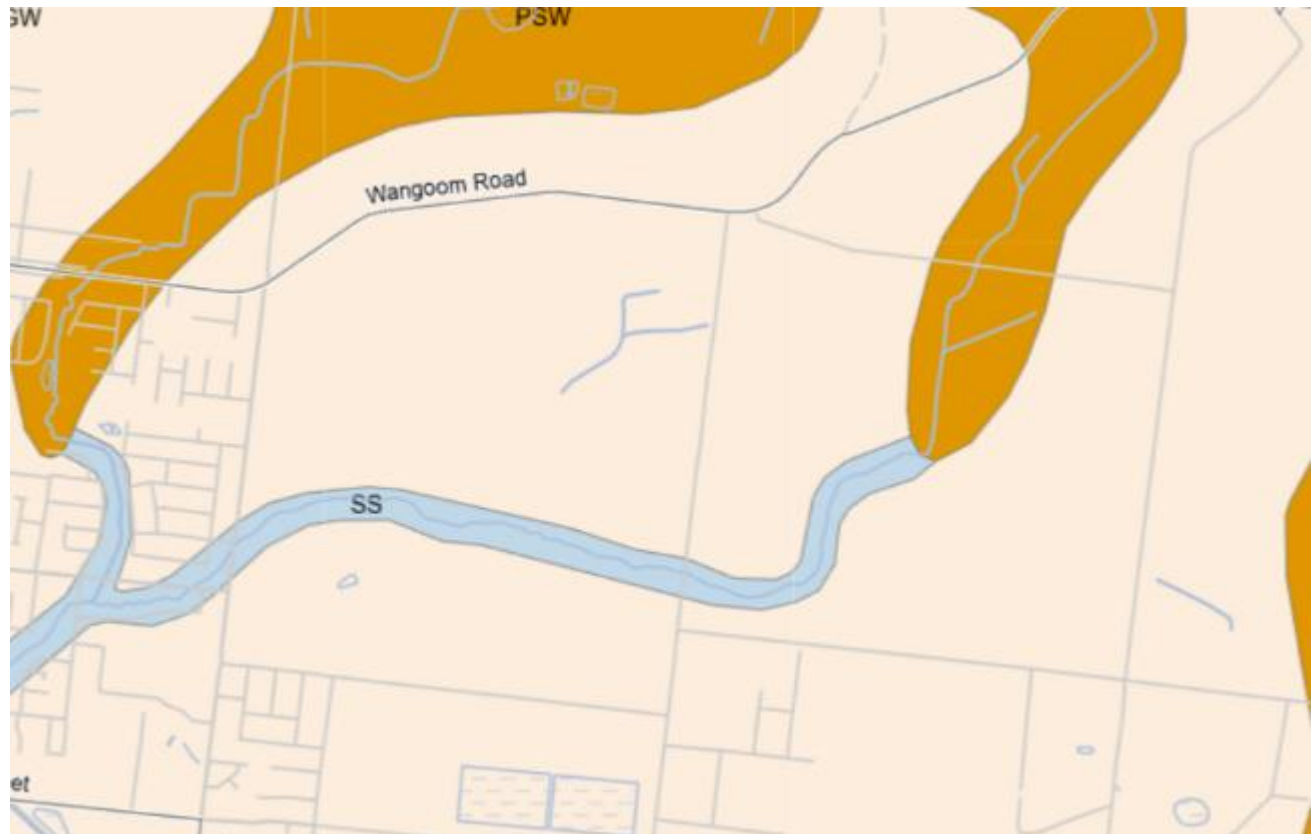
Statement in PSP - Background Report Draft report	Response	Suggested improvements
	This continues during the house construction phase.	sediment and water are appropriately managed.

APPENDICES

APPENDIX 1: The following maps show historical presence of wetlands which do not appear on the DEECA wetlands mapping. The area is historically much wetter than indicated by current conditions. The old maps also show finer scale vegetation than the EVC mapping.

Naturekit EVC mapping

- Pale apricot – **EVC 55: Plains Grassy Woodland**
- Dark orange - **EVC 651: Plains Swampy Woodland**
- Blue – **EVC 53: Swamp Scrub**



FEATR579WANGOOM

[PROV Map Warper:](#)

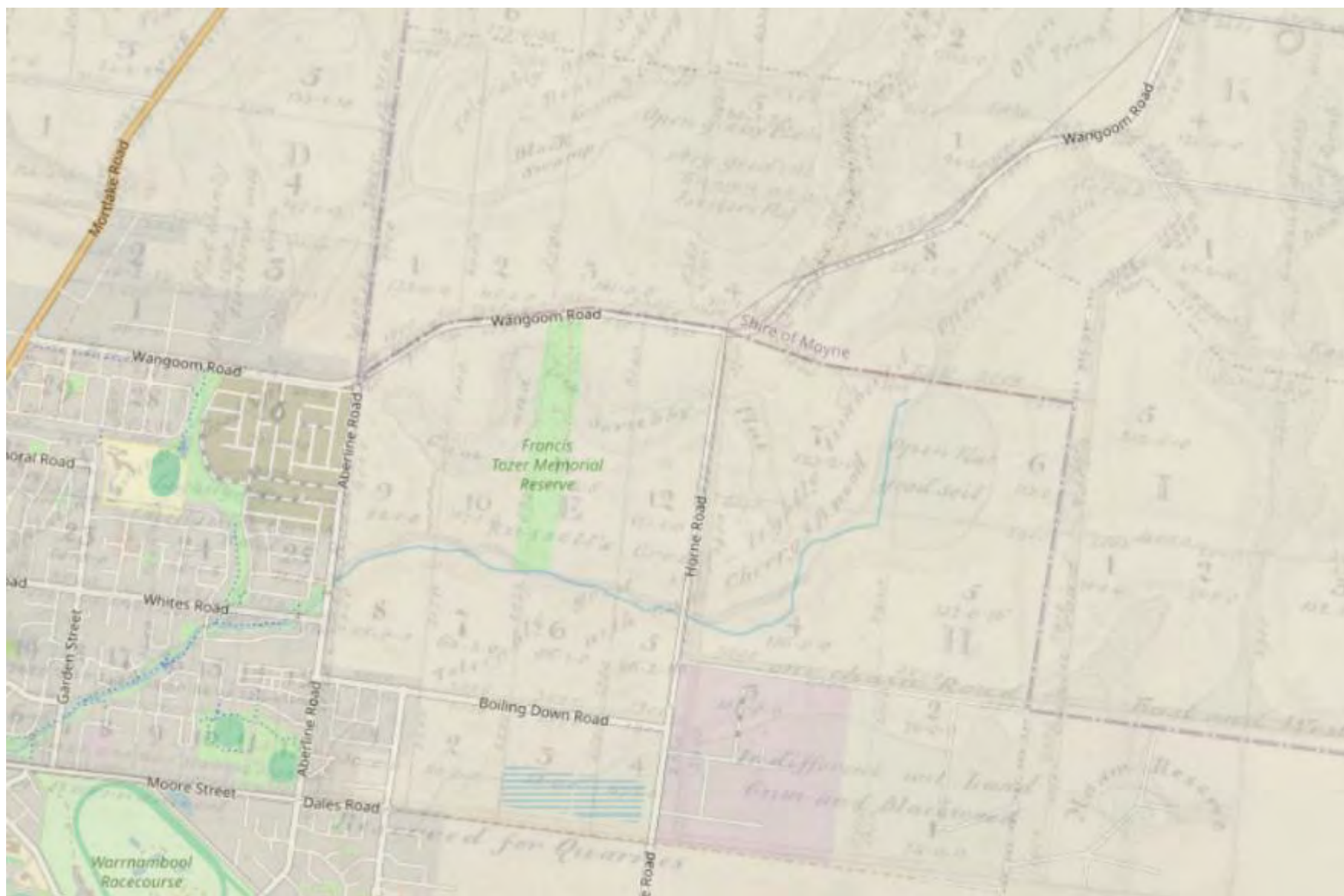
[Viewing Map 6092](#)

Shows open flats and other vegetation detail in proposed development area. These may have been developed by Maar cultural practices (e.g. burning) or subtle differences in wetness/soil.

There is also a wetland identified as 'Black Swamp' to the north of the proposed development area.

See over for how this map overlays with relevant areas.







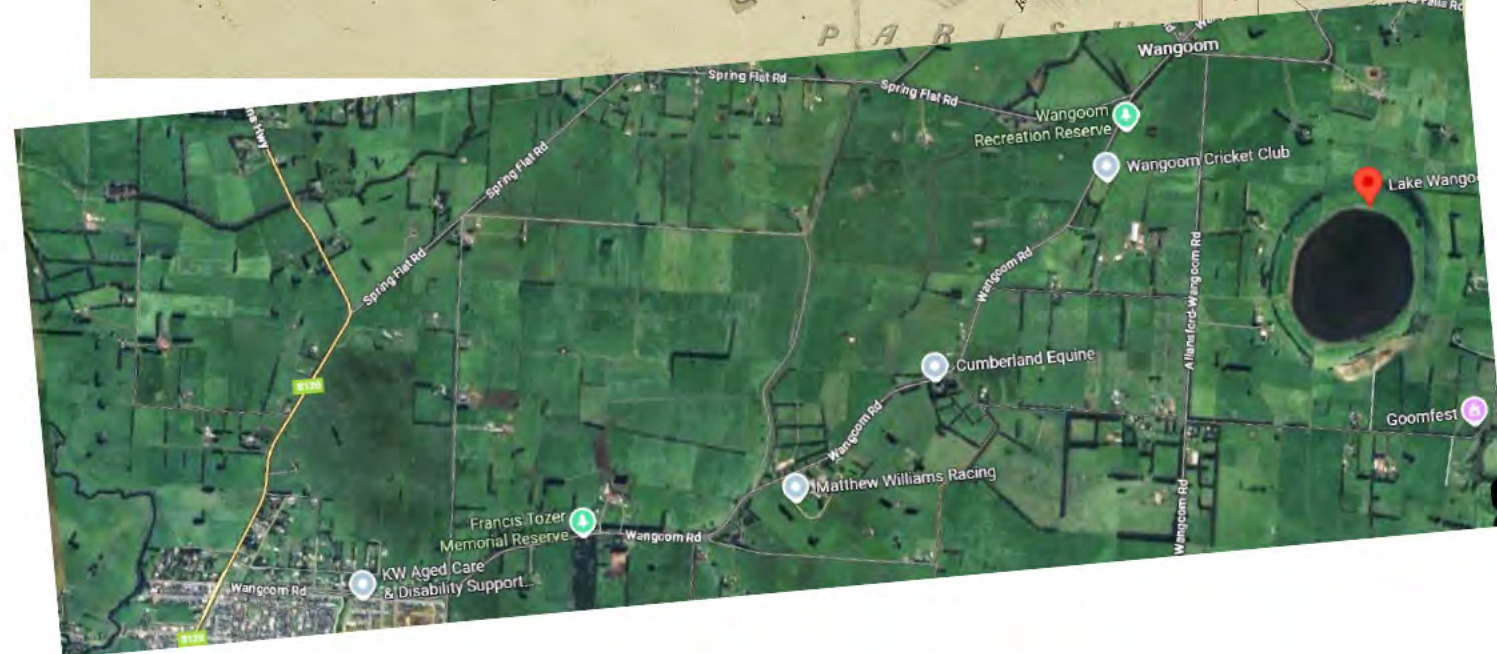
FEATR588WANGOOM WARRNAMBOOL PROV Map Warper: Viewing Map 6101 Doesn't show subject area, but does show swampy land, the Maam, and the Dry Lake.



Plan: G 18: Irrewarra Elliminyt Nalangil
Wangoom & Purnim

<https://prov.vic.gov.au/archive/E700DA76-F86C-11E9-AE98-1115F9979561?image=1>

Showing extensive wetlands to north of proposed development area. Also, the road is 'Spring Flat Road', indicating 'flats' with 'springs'.





APPENDIX 2 – HISTORIC PHOTOS OF PROPOSED DEVELOPMENT AREA SHOWING TOZER RESERVE, WATER RESERVE (purple), AND WETLAND FEEDING RUSSELLS CREEK (orange)

Film Number	CAD8706
Run	COASTAL TIE 1
Frame	13
Date	28 November 1975
Photo Series	Special Project Photography - Supplementary - Colac



Film Number	CAD2662
Run	6
Frame	066
Date	1 May 1981
Photo Series	Special Project Photography - Census Photography - Heywood, Portland



Film Number	CAD/C8796
Run	WARRNAMBOOL-KOROIT
Frame	137
Date	12 February 1979
Photo Series	Project Photography - Census Photography - Warrnambool- Koroit, Colac & Portland



APPENDIX 3 – GOOGLE EARTH IMAGERY

12/1/2003 (western part of proposed development area not available) Orange circle, wetland at headwaters of Russells Creek.	 Satellite imagery from December 1, 2003, showing a landscape with agricultural fields and a creek. An orange circle highlights a wetland area at the headwaters of Russells Creek. The text 'Russell Creek' is visible in the lower-left corner of the image.
12/7/2013 Water Reserve, 143 Boiling Down Rd	 Satellite imagery from December 7, 2013, showing a water reserve area. The image displays a large, irregularly shaped water body surrounded by land, with some vegetation visible along the edges.

2 Feb 2019 Water Reserve, 143 Boiling Down Rd		
21 February 2020 Water Reserve, 143 Boiling Down Rd		

26 October 2021 Water Reserve, 143 Boiling Down Rd	
25 August 2024 Water Reserve, 143 Boiling Down Rd	

END OF SUBMISSION