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4 July 2023

## **Planning permit objection re: application #210357 at 115 Kitty Millers Bay Rd**

### **Summary**

Phillip Island Conservation Society objects to planning permit application #210357 for “use of the land at 115 Kitty Millers Bay Road for Group Accommodation (eco-tourism retreat) and associated buildings and works in a FZ and TRZ2; creation and alteration of access to a road in a TRZ2 and removal of native vegetation pursuant to Clause 52.17”.

PICS considers that the proposal is a poor outcome when weighed against several aspects of the Bass Coast Shire Planning Scheme and strategic planning policy. In our assessment, the application also fails to demonstrate adequate standards of environmentally sustainable design, which is unfortunate given that the proposal is pitched as an “eco-resort”.

We are particularly concerned that the proposal carries significant risk of adverse environmental effects on-site and downstream within the brackish-freshwater ecosystem of Swan Lake and adjoining Little Penguin and Short-tailed Shearwater rookeries within the Phillip Island Nature Park reserve. For these reasons, we recommend that the project is referred for assessment under the Victorian Environment Effects Act and federal EPBC Act.

### **Significant environmental risks and need for state assessment**

The application demonstrates no understanding or consideration of the severe environmental damage caused by excavation to create the existing wetland in the 1960s, which removed topsoil layers, penetrated the clay capping over the saline water table, and flooded the wetland with saline water.

In the 1990s, salinity levels within the artificial lakes were up to 150 percent of the salinity of seawater. This salinity and exposed clay subsoil have created ongoing difficulties in revegetating the site. Phillip Island Landcare undertook plantings of the bare embankments in the 1990s. Initial plantings failed, and it took two decades to achieve a sparse, stable vegetation cover. Until this point, Penguin Parade managers were concerned that the

eroding embankments could fail, causing unintended release of hypersaline water downstream to Swan Lake and lower burrows within adjacent penguin and shearwater rookeries.

In 2023, this embankment vegetation is exhibiting some die-back with little regeneration of new plants. This may be due to a combination of senescence, salinity, harsh microclimate, and pressure from browsing and grazing wildlife, which have grown in abundance in recent years, making revegetation even more challenging.

The application provides insufficient detail regarding soils, hydrology, salinity, and the proposed earthworks and revegetation strategy to enable assessment of the environmental risks created by disturbing the site again through wetland remodelling. These risks include failure of revegetation efforts, embankment erosion, accidental release of hypersaline water, and changes to hydrology that could cause adverse environmental impacts in downstream areas of conservation significance.

Thus, we consider that the application contains insufficient detail to ensure compliance with Bass Coast Planning Scheme clause 13.04-3S, which seeks to “minimise the impact of salinity and rising water tables on land uses, buildings and infrastructure in rural and urban areas and areas of environmental significance and reduce salt load in rivers”. A supporting strategy under this clause is to “prevent inappropriate development in areas affected by groundwater salinity”.

We recommend that Council refers the application for assessment under the Victorian Environment Effects Act. Triggers for referral include potential extensive or major effects on health or biodiversity of aquatic, estuarine or marine ecosystems; land stability, acid sulphate soils or highly erodible soils; and beneficial uses of waterbodies due to changes in water quality, streamflows, or regional groundwater levels.

### **Significant environmental risks and need for federal assessment**

We also recommend that Council requests referral for assessment under the federal EPBC Act, since the proposal is likely to have significant impacts on matters of national environmental significance that the application’s flora and fauna report fails to mention. Species listed under the EPBC Act that are likely to be impacted include the migratory Short-tailed Shearwater, the endangered Eastern Barred Bandicoot, and the vulnerable Hooded Plover.

#### Short-tailed Shearwater

In addition to accidental flooding of burrows near Swan Lake, the Short-tailed Shearwater would be impacted by light pollution associated with the proposed accommodation and guest activities. Fledglings are disoriented by artificial light when attempting to migrate. As a result, they are often grounded, and many birds are killed on roads during this period.

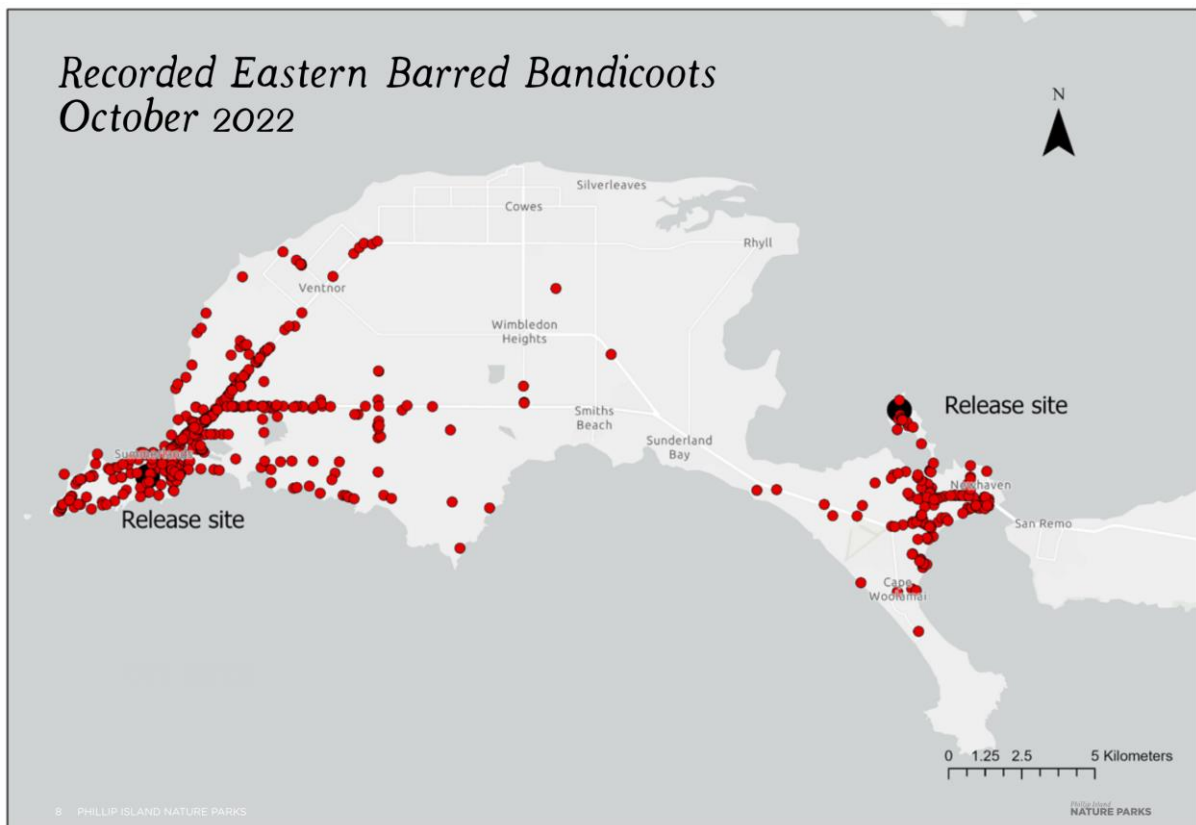
Given proximity to shearwater rookeries and flight paths, the proposal's lighting design, including road lighting, should be informed by an environmental impact assessment and comply with the [National Light Pollution Guidelines for Wildlife](#).

It should be noted that, even if the lighting design is optimal, light emissions associated with guest activity and vehicle use cannot be well controlled.

### Eastern Barred Bandicoot

Preservation of rural land on Phillip Island is important to the national recovery of the endangered mainland Eastern Barred Bandicoot—see attached letter from the Eastern Barred Bandicoot National Recovery Team for background.

Eastern Barred Bandicoots were released in a successful trial on Churchill Island in 2015, followed by release on Phillip Island's Summerland Peninsula in 2017. Since then, the populations have grown and dispersed across a significant area of Phillip Island, including the site of the proposed development.



### Hooded Plover

The beach-nesting Hooded Plover has increased in population on Phillip Island since active management began 25 years ago from 20 individuals to approximately 20 breeding pairs. Although the population now produces some fledglings that disperse to other areas and is potentially sustainable, it is still highly vulnerable to human impacts such as trampling of

camouflaged nests and chicks, and disturbance to chick foraging.<sup>1</sup> This species nests at Kitty Miller Bay and would be impacted by increased visitation to this lesser-known beach if the proposed accommodation development were to proceed.

### **Conflict with Farming Zone objectives**

Under the Bass Coast Shire Planning Scheme, the Farming Zone is intended to “provide for the use of land for agriculture” and “ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture” (clause 35.07). This large-scale accommodation proposal has no connection to agriculture. We recognise that this site is difficult to operate as a viable stand-alone farm. However, this is insufficient justification for its use for large-scale accommodation. We are concerned that approval of this application would create precedent for other Farming Zone land to be developed for intensive non-agricultural purposes.

### **Conflict with landscape objectives**

The Bass Coast Shire Planning Scheme clause 12.05-2L-01 aims to “ensure that development is subordinate and sympathetic to the natural, visual and environmental landscape character and significance of the area”, “protect locally significant views and vistas that contribute to the character of the coastal and coastal hinterland region”, and “minimise the impact of infrastructure on the landscape and viewpoints”.

There are currently views across the applicant’s land from Back Beach Road, a major tourist route, to the state-significant landscape of the Phillip Island southern coast. The land also adjoins the proposed Significant Landscape Overlay 2 identified in the draft Bass Coast Distinctive Areas and Landscapes planning controls.

Rather than sympathetic design that protects vistas and minimises impacts on the landscape, the application proposes a sprawling design of 31 buildings, including a building of almost 11 metres in height, and a house, decks, tents, and swimming pool within the open wetland area.

The application relies on screening by revegetation. However, as discussed above, this is unlikely to be achievable. For these reasons, the application is inconsistent with the landscape objectives of the planning scheme.

### **Conflict with tourism objectives and BURT strategy**

We are aware that this site is within an area recommended by the Bass Coast Unlocking Rural Tourism (BURT) Strategy for investigation as a “Special Use Zone for tourism land uses within rural areas”. However, the site does not fit the attributes set out on page 95 of the BURT Strategy to guide special use zoning. As discussed above, the site is subject to “adverse environmental processes and effects”, which threaten downstream areas of conservation significance if there is further disturbance. As such, it lacks capacity to enable

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<sup>1</sup> Phillip Island Nature Parks Threatened Species Update 2020-21, <https://penguins.org.au/assets/Conservation/Environment/PDF/Threatened-Species-AR-2021.pdf>

development that is “not disruptive to significant vegetation and wildlife”. Further, any development at the site is likely to “affect existing views and landscape” values because of predictable difficulties in screening with revegetation.

For these reasons, the proposal does not meet the objectives of Bass Coast Shire Planning Scheme clause 02.03-7, which states that council seeks to:

- “Support well-designed tourist development in identified locations, that respond to market demands, as well as the coastal and landscape character, and the environmental significance of the area.”
- “Support tourism in rural areas provided it does not come at the expense of their landscape, amenity, liveability, environmental, social and agricultural values.”

### **Design deficiencies**

The application lacks important design details. Omissions include:

- A detailed revegetation strategy with consideration of the saline, heavy clay and other challenging site conditions. There is reference to a schedule of revegetation and earthworks in the staging plan, but none is provided. PICS is concerned that the final phase of revegetation is marked as “low priority”.
- Consideration of the impact of salinity on built infrastructure. The private accommodation, boardwalks, pool, and associated infrastructure within the saline wetland would be especially vulnerable. How will this be mitigated?
- A complete set of elevations and photographic montages to demonstrate impacts on landscape values. The height of the main building at almost 11 metres may be difficult to screen from key viewpoints with the proposed revegetation. There are no elevations of the boardwalk structures and swimming pool.
- Allowance for swimming pool wastewater in the daily wastewater discharge calculation.
- A wildlife-sensitive lighting design that complies with national light pollution guidelines, as discussed above.
- Consideration of the risk of mosquito-borne disease. Can this be adequately managed without adverse impacts on the aquatic ecosystems of the on-site wetland and downstream Swan Lake?
- Identification of disability access throughout the resort. [The Disability Discrimination Act 1992 \(Amendment 30 September 2020\) Disability \(Access to Premises — Buildings\) Standards 2010](#) requires that a Class 1b building that comprises 11 to 40 single dwellings on the same allotment used for short-term holiday must provide a minimum of two disability accessible units. There must also be disabled parking areas, and disabled access to all public areas, including swimming pools, kitchens, dining, etc.
- Discussion in the environmentally sustainable design (ESD) report of the negative ESD aspects of the proposal, including under-provision of solar panels, the widely

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dispersed layout of dwellings and roads, and placement “eco-tents”, some of which face south, along wetland boardwalks.

- Evidence that the positive ESD report claims are adequately captured in the application plans and able to be captured as enforceable conditions of permit. We have set out our detailed ESD report critique in the appendix to this submission.

**Further information**

Thank you for the opportunity to comment on this proposal. If you have any questions regarding this planning permit objection, please contact us at [phillipislandconservation@gmail.com](mailto:phillipislandconservation@gmail.com).

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Appendix to Objection by Phillip Island Conservation Society

Assessment of the Environmentally Sustainable Design Report prepared by Low Impact Development Consulting  
 21.12.2022

ESD report items	Permit application drawings Compliance and comments (Y=complies, X=does not comply, ? =queries)	
ESD Initiative highlights (pages 4 and 5)	<p><b>The 18 ESD initiatives are highlighted in summary here. Whilst we agree with the goals that are aspired to in each of these initiatives put forward by LID, we have concerns about the adoption and inclusion of the initiatives in the permit application drawings and documents.</b></p> <p>We have set out our detailed concerns and criticisms of the 12 components of the topics listed under the Policy framework.</p>	
Policy framework (page7)	<p>LID have set out their ESD considerations with the intention of demonstrating that the development will implement mandatory ESD and Best Practice requirements. We point out that LID have not commented on the negative ESD aspects of the proposal, including the widely dispersed lay out of the cabins and the placing of Eco tents along a board walk over the water. Nor have LID addressed the ESD issue of embodied energy use and in particular the use of aluminium window frames instead of timber.</p>	
<p><b>1. Carbon neutral/Net Zero Emissions ready</b>(Page 8)</p> <p>a) Space heating and hot water heating will be supplied from electricity.</p> <p>b) Hand held equipment including maintenance equipment will be powered by electricity.</p> <p>c) The Retreat will <u>aim</u> to reduce waste and emissions by waste minimalization and maximising recycling.</p> <p>d) The retreat will have a “No plastic” policy.</p>	<p>a) This is not shown on the drawings. It is questionable whether Council can make this a Condition on the Permit.</p> <p>b) As noted above. Would not include gardening equipment anyway.</p> <p>c) This is not shown on the drawings. It is a vague statement as it only “aims” to reduce waste. Will this be a Condition on the permit? How can this requirement be enforced on visitors and guests?</p> <p>d) How would this be enforced? It is questionable whether Council can make this a Condition on the Permit.</p>	<p>?</p> <p>?</p> <p>?</p> <p>?</p>
<p><b>2. Energy Consumption /Efficiency</b> (pages 9,10)</p> <p><u>Energy efficiency</u>                      The development will be required to meet BCA /NCC Section J (2019) energy efficiency requirements.</p> <p><u>Good passive design</u> (assuming this refers to passive solar design)</p> <p><u>Hot water supply</u>                      Electric boosted solar hot water will service the Cabins and Private accommodation.</p> <p><u>Heating and cooling/HVAC Controls</u>                      Reverse cycle air conditioning and ceiling fans will be used.</p> <p><u>Double glazed windows</u>                      All building windows will be double glazed.</p>	<p><u>Energy efficiency</u>                      The building surveyor will make this assessment at the building permit stage. It is assumed that the building surveyor will accept that the design was commenced before the higher standard requirements of the NCC 2023 applied.</p> <p><u>Good passive design</u>                      Unit 2, The Private Accommodation, Cabins 9,10 and 11 and Eco tents 11,12 and 14 do not have northern orientations and thus do not have passive solar design attributes.</p> <p><u>Hot water supply</u>                      This is not noted on the drawings. Will this be a Condition on the Permit? There is no reference to the heating of hot water in the Eco tents.</p> <p><u>Heating and cooling/HVAC Controls</u>                      There is no reference to the heating and cooling of the Eco tents.</p> <p><u>Double glazed windows</u>                      This will be necessary for compliance with the BCA/NCC energy efficiency requirements. No reference is made to the Eco tents. How will they comply with the energy efficiency requirements?</p>	<p>Y</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

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<p><u>Tighter building envelopes etc..</u>                  The buildings will be designed to general Passivhaus principals.</p> <p><u>Power and data points/Building sealing/Ventilation/Heating and cooling units filter cleaning</u></p> <p><u>Lighting</u>                  LID have not addressed the external lighting requirements.</p> <p><u>Individual metering</u>                  The cabins and gateway buildings will be separately metered.</p> <p><u>Cooking</u>                  The Cabins and Eco tents will have induction cook tops.</p>	<p><u>Tighter building envelopes</u>                  There is a distinction between Passivhaus principles and passive solar design. Passivhaus is an internationally registered system where tests and certificates are required to qualify for a Passivhaus certificate. If Passivhaus is to be included in a Condition of the Permit then there needs to be a mechanism for registering the Passivhaus compliance. There is no reference to the Eco tents. They will obviously not comply with Passivhaus.</p> <p><u>Power and data points/Building sealing/Ventilation/Heating and Cooling</u>                  These are all positive actions that would be assessed at the building permit stage.</p> <p><u>Lighting</u>                  The external lighting needs to be designed carefully. Factors to be considered are safety issues on the board walks and paths. Lighting glare will interfere with the short tailed shearwaters. Water bred mosquitoes can be a problem in this location. The external lighting will need to respond to the challenge of attracting mosquitoes and other night time insects.                  External lighting levels, types and positions have not been addressed or shown on the plan.</p> <p><u>Individual metering</u>                  The Eco tents will not be separately metered. Given that this accommodation type will have the most energy consumption, due to the lack of insulation, these should be separately metered also. We note that this requirement is probably not enforceable through the planning permit.</p> <p><u>Cooking</u>                  Cooking in tents is challenging due to smells and steam. There is also the risk of fire. The kitchenettes are shown against the side walls but electric or natural exhaust openings are not shown.                  Cooking in the tents located along board walk will be difficult as there will not be an opportunity for outdoor cooking compared to the tents located along the lake's edge where, we presume, electric BBQs will be installed.</p>	<p>?</p> <p>Y</p> <p>X</p> <p>?</p> <p>?</p>
<p><b>3. Energy Generation - Solar PV</b> (pages11,12)                  The chart lists the number of Proposed PV panels for each building type. It also lists the potential future Solar PV capacity.</p>	<p>Solar PV is one means of complying with the BCA/NCC energy efficiency requirements. With the proposed 29kW of PV power there will be a large demand on the grid feed supply. The potential future Solar PV could be brought forward to reduce demand on the grid supply.                  Improved building orientation (refer Good passive design above) would also reduce demand on the grid supply as well as allowing an increase in the number of roof panels.</p>	<p>X</p>
<p><b>4. Indoor Environment Quality</b> (page 13)</p> <p><u>Daylight</u>                  Appropriate levels should be facilitated.</p> <p><u>Ventilation</u>                  Openable windows and ceiling fans reduce demand on air conditioning during warm weather.</p>	<p><u>Daylight</u>                  High level windows and a narrow floor plan will provide appropriate levels of daylight.</p> <p><u>Ventilation</u>                  Openable windows and ceiling fans will assist in reducing the demand for air conditioning.                  Ventilation of the Eco tents during warm weather has not been addressed.</p>	<p>Y</p> <p>Y</p> <p>X</p>



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<p><u>Low VOC products (Volatile Organic Compounds)</u>                  Low VOC products will be used to maintain better indoor air quality.</p> <p><u>Low formaldehyde products</u>                  Will be used.</p>	<p><u>Low VOC products</u>                  These are not shown or describes in the Materials Schedule. It is not clear how contractors' compliance can be enforced.</p> <p><u>Low formaldehyde products</u>                  As noted above these are not shown. How would compliance be enforced?</p>	<p>?</p> <p>?</p>
<p><b>5. Water Conservation</b> (page 14)  <u>Water efficient fixtures, fittings and appliances</u></p> <p><u>Recycled water</u>                  The recycled water may also be used for toilet flushing.</p> <p><u>Water pumps/Water metering</u></p>	<p><u>Water efficient fixtures etc.,</u>                  Will be assessed as part of the building permit stage to ensure they comply.</p> <p><u>Recycled water</u>                  This use needs to be confirmed and noted on the permit drawings or documents.</p> <p><u>Water pumps/Water metering</u>                  These will need to meet the requirements of the Water authority.</p>	<p>Y</p> <p>X</p> <p>Y</p>
<p><b>6. Stormwater Management</b> (pages 15,16)  <u>Best practice Stormwater Management</u>                  Bio filtration/Rain gardens are proposed.                  Water Sensitive Urban Design (WSUD) is to be incorporated.</p>	<p><u>Best Practice Stormwater management</u>                  The positions and sizes of the Bio filters/Rain gardens are not shown on the architectural or landscape architectural plans. The WSUD features are not shown on the plans, A final detailed SW design is required before approval by Council, rather than a Condition on the Permit. The SW referral authority comments should be addressed.</p>	<p>X</p>
<p><b>7. Climate Resilience</b> (pages 17,18)  <u>Shading in outdoor spaces</u>                  The site should attain a resilience goal of 50% of paths being shaded by trees</p> <p><b>8. Ecology Page (page 18)</b>  <u>Erosion control during construction</u>                  Silt fences, erosion control blankets and drain filters will be utilized.</p> <p><u>Low impact walkways.</u>                  This strategy minimises the environmental impact caused by the walk ways over the Swan Lake Drain.</p> <p><u>Low maintenance planting/Flora and Fauna</u>                  These statements are very general and don't offer advice.</p>	<p><u>Shading in outdoor spaces</u>                  The landscape plan is only a <b>preliminary landscape master plan</b>. There is no information or detail on the drawings to show compliance with the recommendations for shading of paths and car parks.</p> <p><u>Erosion control</u>                  This would need to be Conditioned by Council and enforced by Council.</p> <p><u>Low impact walkways</u>                  There is no recommendation from LID here. Just a statement that the walkways have less environmental impact by being positioned above the drain. But that is obvious.</p> <p><u>Low maintenance planting/Flora and Fauna</u>                  The preliminary landscape master plan does not include a list or schedule of suitable plant types.</p>	<p>X</p> <p>Y</p> <p>?</p> <p>X</p>
<p><b>9. Material Selection (page 19)</b>  <u>Supplementary Cement Materials</u>                  The report states that supplementary cement materials will be used.</p> <p><u>Greener asphalt</u>                  Greener asphalt mixes,...may be incorporated.</p> <p><u>Light coloured paving</u>                  Where possible paving will be light-mid tone.</p>	<p><u>Supplementary Cement Materials</u>                  This is <u>not</u> noted on the plan or in the materials schedule.</p> <p><u>Greener Asphalt</u>                  This statement is vague. Greener asphalt is <u>not</u> noted on the plan.</p> <p><u>Light coloured paving</u>                  The Report states that where possible, paving will be light coloured. This is vague. Light coloured paving is shown in the Materials Schedule but not clearly defined on the plan.</p>	<p>X</p> <p>X</p> <p>X</p>

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<p><u>Light coloured roofing.</u> Where possible, building roof colours will be light – medium colour.</p> <p><u>Sustainable timbers</u> No unsustainable rainforest timbers will be incorporated.</p> <p><u>Bollards, external seating...etc..</u></p> <p><u>Carpet tiles</u></p> <p><u>Aluminium window frames</u> These <b>have not</b> been shown in the Schedule.</p>	<p><u>Light coloured roof</u> Generally the roofing colour is COLORBOND Windspray which is a mid grey. It is not as reflective as many of the other COLORBOND roofing colours. Generally, all external wall cladding and large areas of roof side gables will be COLORBOND Monument (Black) or Stained black. This colour absorbs heat.</p> <p><u>Sustainable timbers</u> More detail is required in the Materials Schedule e.g., The boardwalk material is only described as TIMBER.</p> <p><u>Bollards, external seating etc..</u> The detailed materials should be noted in the Materials Schedule</p> <p><u>Carpet tiles</u> A good choice for floors but outside the scope of the Planning control.</p> <p><u>Aluminium window frames</u> Was this an omission by error or was it not included because new aluminium window and door frames have a very high embodied energy rating? Depending on the criteria used for assessing the embodied energy of building materials, aluminium is generally rated 10-50 times higher than timber.</p>	<p>X</p> <p>X</p> <p>X</p> <p>Y</p> <p>X</p>
<p><b>10. Waste management</b> (pages 20,21,22)  <u>Construction waste and recycling</u>                  A minimum of 80% of materials will be recycled during construction.</p>	<p><u>Construction waste and recycling.</u>                  LID provides highly detailed advice over two and a half pages. They also refer to a separate Operational Waste Management Plan in accordance with BCSC Waste Management Policy. We presume that Council would require that this be incorporated in any Conditions on the Permit. 80% is a very high target in today's working conditions. Will 80% be achievable and how will it be certified. Will this be monitored and enforced by Council?</p>	<p>?</p>
<p><b>11. Sustainable Transport and Connectivity</b> (p 22)</p>	<p>The positions or numbers of undercover bicycle and e-bike parking and e-bike charging stations are not shown on the plan. 9 of the 14 proposed eco tents are located above water and will have no space for bicycle or e-bike parking.</p>	<p>x</p>
<p><b>12. Community sustainability leadership</b> (page 23)</p>	<p>The statements made here are inspiring. However, they do not include the consideration of the use of low embodied materials and processes in the list of Sustainability considerations.</p>	<p>x</p>

To whom it may concern,

RE:

I write to express the importance of open farmland habitat for the recovery of the mainland eastern barred bandicoot on Phillip Island, and more broadly across Victoria.

The mainland eastern barred bandicoot was classified as 'Extinct in the Wild' in Victorian with the last recorded wild individual sighted in 2002. The recovery of the taxon is described in the National Recovery Plan 2021 (Department of the Environment 2021) and in the book chapter by Hill, Coetsee and Sutherland (2018). These illustrate the critical importance of fox-free environments for population persistence and recovery. Populations have only persisted while foxes have been excluded.

The National Recovery Plan 2010 (Hill, Winnard & Watson 2010) proposed establishing eastern barred bandicoots on fox-free islands due to the large potential area of fox-free habitat that is suitable for eastern barred bandicoots. Establishment at large fox-free sites could achieve the rapid expansion of population size that is required to secure the species and halt the continuing decline in genetic diversity.

The overall objective of the National Recovery Plan 2021 is to secure the long-term evolutionary potential of the mainland Eastern Barred Bandicoot by establishing and maintaining a minimum of 4 genetically diverse, spatially independent, self-sustaining reintroduced populations which total no less than 2500 individuals.

Phillip Island was declared fox free in 2017 after the last confirmed sighting of a fox in 2015. Phillip Island is considered to have about 9000 hectares of suitable habitat for eastern barred bandicoots (Department of the Environment 2021), which provides sufficient suitable habitat for a self-sustaining population that does not require ongoing genetic management. Eastern barred bandicoots have successfully established on Phillip Island and have spread at least 10 km from the release sites, now occupying and utilising large areas of reserves and farmland across Phillip Island.

The highest priority populations for the Recovery Plan 2021 are those sites that are largest in suitable habitat area and therefore have the highest ultimate population potential (Department of the Environment 2021). Hence, the Phillip Island populations is one of the highest priority populations for the recovery of the taxon.

Eastern barred bandicoots nest under vegetation during the day and forage at night in open habitats. Eastern barred bandicoots utilise more open habitats in the absence of foxes than in the presence of foxes (Winnard, Di Stefano & Coulson 2013). Data from live trapping (Townsend 2020), digging surveys (Halstead *et al.* 2020) and radio tracking of eastern barred bandicoots on Churchill Island (Rendall, Coetsee & Sutherland 2018) shows that bandicoots use open farmland extensively to forage at night and can nest there during the day. Data from Churchill Island indicates they are at least as abundant in open farmland as woodland habitat when foraging (D. Sutherland unpublished data).

Given that open farmland forms more than 60% of the area of Phillip Island considered suitable for eastern barred bandicoots and that the species occupies and uses open farmland, open farmland habitat on Phillip Island is important for securing the species and meeting the long-term objectives of the National Recovery Plan 2021.

As a consequence of eastern barred bandicoots successfully establishing on fox-free islands with open farmland (Churchill Island, Phillip Island and French Island), the mainland eastern barred bandicoot has seen a recovery and been reclassified of from 'Extinct in the Wild' to 'Endangered'. The Eastern Barred Bandicoot National Recovery Team recognises open farmland habitat on Phillip Island as important for the recovery of this species.

Yours sincerely,



Dr Duncan R. Sutherland

Chair, Eastern Barred Bandicoot National Recovery Team

Date: 6 April 2023

#### References:

- Department of the Environment, L., Water and Planning, (2021) *National Recovery Plan for the Mainland Eastern Barred Bandicoot *Perameles gunnii* (Victorian subspecies)*. Australian Government, Canberra.
- Halstead, L.M., Sutherland, D.R., Valentine, L.E., Coetsee, A.L., Rendall, A.R. & Ritchie, E.G. (2020) Digging up the dirt: quantifying the effects on soil of a translocated ecosystem engineer *Austral Ecology*, **45**, 97-108.
- Hill, R., Coetsee, A. & Sutherland, D.R. (2018) Recovery of the mainland subspecies of Eastern Barred Bandicoot in Victoria. *Recovering Australian Threatened Species: a Book of Hope* (eds S. Garnett, P. Latch, D.B. Lindenmayer & J.C.Z. Woinarski), pp. 249-257. CSIRO Publishing, Collingwood.
- Hill, R., Winnard, A. & Watson, M. (2010) *National Recovery Plan for the Eastern Barred Bandicoot (mainland) *Perameles Gunnii* Unnamed Subspecies*. Department of Sustainability and Environment.
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- Townsend, T. (2020) Comparing the population ecology of eastern barred bandicoot island introductions. Bachelor of Environmental Science (Honours) Honours, Deakin University.
- Winnard, A.L., Di Stefano, J. & Coulson, G. (2013) Habitat use of a critically-endangered species in a predator-free but degraded reserve in Australia. *Wildlife Biology*, **19**, 429-438.