REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Impact Assessment Unit (IAU) at the Department of Environment, Land, Water and Planning (DELWP) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once IAU is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
    - a brief description of potential changes or risks to environmental assets resulting from the project;
    - available information on the likelihood and significance of such changes;
    - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 2MB as they will be published on the Department's website.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

Minister for Planning
GPO Box 2392
MELBOURNE VIC 3001

Couriers

Minister for Planning
Level 20, 1 Spring Street
MELBOURNE VIC 3001

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@delwp.vic.gov.au is required. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

<table>
<tr><td>Name of Proponent:</td><td>Seacombe West Pty Ltd</td></tr>
<tr><td>Authorised person for proponent:

Position:
Postal address:
Email addres
Phone number:
Facsimile number:</td><td>James Troedel

CEO
Unit E114, 85 Rouse Street, Port Melbourne
james.troedel@seacombewest.com.au
0418 544 326
-</td></tr>
<tr><td>Person who prepared Referral:
Position:
Organisation:
Postal address:
Email address:
Phone number:
Facsimile number:</td><td>Clare Szymczyk
Senior Consultant
Urbis Pty Ltd
Level 12, 120 Collins Street, Melbourne Vic 3000
cszymczyk@urbis.com.au
(03) 8663 4958
-</td></tr>
<tr><td>Available industry & environmental expertise: (areas of ‘in-house’ expertise & consultancy firms engaged for project)</td><td>Seacombe West Pry Ltd have engaged an extensive team of experienced consultants to undertake technical investigations and assessments to inform the project design and the information within this referral.

The project team consists of:

<table>
<tr><th>Expertise</th><th>Consultant</th></tr>
<tr><td>Architectural</td><td>Alfano Studio</td></tr>
<tr><td>Landscape</td><td>TCL</td></tr>
<tr><td>Town Planning</td><td>Urbis</td></tr>
<tr><td>Sustainability</td><td>Atelier Ten</td></tr>
<tr><td>Civil Engineering</td><td>Cardno</td></tr>
<tr><td>Ecological</td><td>Ecology and Heritage</td></tr>
<tr><td>Cultural Heritage</td><td>Biosis</td></tr>
<tr><td>Environmental Management</td><td>Aecom</td></tr>
<tr><td>Water</td><td>CJ Arms</td></tr>
<tr><td>Flooding</td><td>Cardno</td></tr>
<tr><td>Geotechnical</td><td>Golders</td></tr>
<tr><td>Traffic</td><td>Cardno/Traffix</td></tr>
<tr><td>Waste</td><td>Arup</td></tr>
<tr><td>Tourism</td><td>Westerlund Global</td></tr>
<tr><td>Economic Impact</td><td>Deloitte</td></tr>
<tr><td>Energy</td><td>Analytical Engines</td></tr>
<tr><td>Structural Engineering</td><td>Felicetti</td></tr>
</table>
</td></tr>
</table>

2. Project – brief outline

Project title: Nunduk Retreat & Spa

Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)

The project is located on land at on land at 3215 Longford-Loch Sport Road in Seacombe.

The AMG Coordinates (Zone 55) are:

- 533,776.825
- 5,780,287.479

Refer to maps at Attachment A.

Short project description (few sentences)**:**

The project comprises a luxury retreat, known as the Nunduk Retreat & Spa.

The proposed Retreat consists of:

- A Central Retreat, comprising 36 hotel rooms, a restaurant, lounge and bar, gallery, shop and a spa and wellness centre;
- 15 Secluded villas, with a total of 45 bedrooms; and
- An infrastructure area, including staff accommodation, parking and services (including wastewater treatment).

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

Nunduk Retreat & Spa aims to be Regional Victoria's first 5 Star luxury resort.

Nunduk will consist of luxury accommodation and a wellness spa that will provide guests with an immersive and restorative experience. The project seeks to become the benchmark premier luxury resort and well-being spa facility in Australia.

The project seeks to:

- Be integrally connected to the outdoors and provide relaxation and well-being benefits of a hot springs spa in a stunning natural landscape
- Harness the natural site assets including geothermal resources
- Be one of the first Australian projects purpose built on regenerative design principles and be a model and world leader in the export of regenerative development knowledge
- Provide economic and financial benefit to the region and build the local economy by supporting local businesses
- Protect and encourage resident and migratory species
- Ensure development is self-sustaining
- Support local food intake and agriculture
- Be economically viable as an integrated operating business, matching the ecological vision of the project with an appropriately sustainable economic model
- Provide leading edge sustainable construction and operation
- Showcase Australian Flora and Fauna in a natural setting
- Promote the regeneration of the land thereby increasing biodiversity
- Understand, honour and respect the aboriginal ancestry of the landscape
- Involve local aboriginal community in the management of the land and to showcase Aboriginal culture

The project will result in significant socio-economic benefits, being forecast to:

- Increase the Gippsland region's gross regional product by $140 million between 2019-2030
- Increase the State's gross state product by $160 million between 2019-2030
- Provide an additional 108 full-time equivalent jobs by 2030, with an increase during the construction phase

Refer to Section 2 of the Planning and Urban Context Report at Attachment D.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):

Lake Wellington is the largest lake within the Gippsland Lake area. The Lake is surrounded by public reserves, with limited opportunities for the community to utilise the lake and benefit from the amenity it provides.

The subject site forms part of one of the few private landholdings fronting the Lake. Historically, the site has been used for cropping and sheep grazing. Naturally, these farming activities have impacted the landscape. Since the opening of Lakes Entrance in the late 1980s, the natural environment has further degraded due to rising salinity levels within Lake Wellington. This has resulted in the loss of vegetation and the erosion of the foreshore, as well as severe impacts on soil quality within the project area. For these reasons, the project area is no longer agriculturally viable.

With the land no longer able to be used for farming, alternative uses were considered for the land, particularly those that support other purposes of the Farming Zone, such as encouraging employment to support rural communities and facilitating use and development based on comprehensive and sustainable land management practices.

With the conservation approach failing in the region and having significant impacts on the environment of the Lake's foreshore, in 2016 Seacombe West Pty Ltd engaged with the University of Melbourne to research the potential for Australia's first regenerative community on the subject site. This however, would have involved significant impacts to the land and thus, in

2017, a new approach was considered: the use and development of a luxury retreat, that would maintain the regenerative approach, yet could be designed to tread as lightly as possible on the land.

In August 2017, a Tourism Product Evaluation was undertaken by Westerlund Global confirming the opportunity for the proposal in the Victorian market.

The Gippsland/Lakes tourism region received over 5.6 million overnight visitors in the year end to March 2017. Of approximately 1.93 million surveyed in the year end to March 2017, the main reasons for visiting the region was for holidays (51%). Demographically, most visitors (around 33%) to the area are between 40 to 54 years old, as well as a younger demographic between 25 - 39 years' old (around 30%). This suggests that the majority of visitors are adult couples and family groups.

There is however, a limited commercial accommodation offering in the area. The closest town of Loch Sport has limited casual accommodation and relies on Bed and Breakfasts, holiday lettings and Airbnb to meet the need of travellers, with camp grounds and caravan parks also providing accommodation options. The closest established accommodation market is Sale. Consideration therefore, was given to multiple accommodation options with varying scale, with operators confirming preference for a luxury resort that would draw both local and international tourists to the region.

The clear market demand for the proposal was further supported by State policy, which acknowledges that nature-based tourism is a major economic driver for Regional Victoria and recognises that there are significant opportunities for Regional Victoria to increase its share of the tourism market.

Main components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The subject site (the area of proposed works) comprises approximately 91.5 hectares (of the 2,481ha landholding), however the land impacted by the development is limited to approximately 9 hectares.

The site will be accessed by the existing track from Longford-Loch Sport Road, with a length of approximately 2.5 kilometres. This track (approximately 4 metres in width) will be extended and formalised in the north with an elevated track and boardwalks, serving the Central Retreat Building, the villas and the Infrastructure Zone.

The Central Retreat will be setback a minimum of 120 metres from the Lake foreshore. The building has a length of approximately 280 metres and a height of 16.95 metres.

The villas, located to the east of the Retreat will be setback a minimum of 230 metres from the foreshore, with a maximum height of 8.7 metres.

The infrastructure/services area is located approximately 250 metres south of the Central Retreat. These components are predominantly located with a 5000sqm roofed area, comprising an open-sided, lightweight steel structure with an overall height of 8.4 metres.

Refer to architectural plans at Attachment B.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

It is anticipated that geothermally heated water will be utilised in the natural hot spring pools located in the Central Retreat building. In addition, a geothermal interface may be present in the design through space/underfloor heating. The geothermal water comprising a low level of salinity and while low, consideration has also been given to desalination, which will be utilised if required to treat the water. The geothermal and potential desalination components are outlined following.

Geothermal Water

There are two sources of groundwater on the site, with one source comprising geothermal water from a deep aquifer (over 1 km deep). This water will be at an estimated 60 to 65 degrees and be relatively pure, containing between 500-1000 ppm of dissolved salts (but likely at the lower end).

It is anticipated that geothermally heated water will be drawn from a local aquifer and provided for use in the natural hot spring pools located in the Central Retreat building, as well as the potential for inclusion of a geothermal interface the design through space/underfloor heating.

The geothermal resource is a fundamental element in the project in that the spas are a major attraction. Geothermal water will be used directly in the spas as well as the heat being utilised within the resort as a renewable source of heat energy. Once cooled the water will be stored on site and utilised for agricultural irrigation on the property. With a salinity level of 500 -1000ppm, the water is appropriate not just for use as mineral water but also for irrigation purposes, stock water, ecosystem protection and is also acceptable as drinking water.

The water leaving the spas will be stored on site in holding ponds to be drawn when required for agriculture. In other words, the spa use will be relatively constant and the agricultural needs will be intermittent. The dam will be designed so that the walls are above flood level and will be located away from any acid sulphate soils. The location of the CASS has been mapped and is close to Lake Wellington and well away from the proposed holding site (within the infrastructure zone).

Seacombe West Pty Ltd currently have a permit from Southern Rural Water for a preliminary bore. Approval will then be required for the production bore, for which a water allocation is required. Seacombe West have an agreement in place to purchase a local allocation (up to 100ML), which will exceed the total demand for the Retreat.

Further, a works approval will be obtained for use of both the geothermal and the treated waste water for discharge as irrigation for agriculture. This will ensure the processes meet EPA requirements.

If the geothermal is found to be not hot enough then external heating can be applied, however, the aquifers are well understood, and the consultants confirm that the anticipated flow and temperature are highly likely.

Desalination

Rainwater is proposed as the key supply of potable water for the development, providing an estimated 88% of potable water demand. The development has been designed to capture almost all rainwater runoff to meet this demand, with a 1,500kL rainwater storage tank proposed.

Groundwater will be the supplementary supply for the Retreat, comprising an anticipated 12% of potable water requirements. For this use, suitable desalination may be required. The salt content of the water however, is low and minimal desalination is anticipated to be required.
The salt content is expected to be between 500-1000ppm.

It is understood that at 500ppm the groundwater could potentially be used for drinking, however, the groundwater would need to be tested thoroughly to confirm that it is suitable and safe to use for a potable water supply. If desalination is required, the resultant salt disposal would be minimal, with the following anticipated:

- Based on 1 ML of water per annum and a source water salt (total dissolved solids (TDS)) concentration of 1000 ppm, 1000 kg of salt per year would result (less than 1 cubic metre of dry salt after drying in a drying pan).
- If the source water has a TDS of 500 mg/L, then the amount of salt would reduce to 500 kg/annum (less than 0.5 cubic metres after drying).
- The drying pan would be lined with high-density polyethylene (HDPE) to prevent salt from leaching into the ground.

Key construction activities:

The development has been designed to minimise construction activities and impacts. The key activities are summarised as follows:

- The Retreat will be constructed using driven piles to elevate the development above predicted flood levels
- Backfilling and importation of clean fill and topsoil will be required to construct the roof
- The building materials will be brought onto site and stored in areas where construction will occur (i.e. the materials laydown area and site shed will be initially within the footprint of the main building and will then be moved to the car park in the infrastructure zone when the main building and villas are under construction).
- Refuelling will mainly be offsite although cranes and drill rigs will be refuelled on site using a mobile tanker.

As the construction of the Retreat will utilise driven piles, it will not include excavation such as digging, tunnelling, removal of material, scooping, cutting, trenching, drilling, boring or other activity that will result in the movement of earth.

The future works approval will ensure any environmental implications of the desalination are carefully considered and all processes meet relevant EPA requirements.

Refer to Section 6 and Section 7 of the EMP at Attachment F.

Key operational activities:

The Retreat will operate year-round for 7 days a week, 24 hours a day.

The number of staff are estimated between 80-120, however not all will be on site at one time. The staff will work in shifts, with three shifts, one of these being overnight. As such, it is estimated that approximately 50% of the staff will be on site at any one time. The maximum number of guests that can be accommodated in the retreat are 162 people (comprising 81 couples).

Key operation activities include:

- Collection and disposal of non-recyclable waste (including maintenance waste)
- Goods delivery (assume vehicle based)
- General small scale maintenance (work force, transportation, equipment, materials)
- Waste treatment operation

During operation, the Environmental Management Plan (EMP) prepared by Aecom will guide the planning, management and routine activities on site to manage environmental impacts.

Refer to Section 6 and Section 7 of the EMP at Attachment F.

Key decommissioning activities (if applicable):

Not applicable.

Is the project an element or stage in a larger project?

☒ No ☒ Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

Is the project related to any other past, current or mooted proposals in the region?

☒ No ☒ Yes If yes, please identify related proposals.

The project is not related to any previous proposal, however there was a proposal considered in its early conception stage on the subject site in the early 2000s known as Wellington Waters.

Wellington Waters proposed a new town on the land covering an extensive area of 725 hectares. The scale and nature of the Wellington Waters development had the potential for significant effects on the environment as a result of its scale, excavation of land and connections to, and

works in, Lake Wellington. The proposal was not pursued and was never formally lodged with authorities.

4. Project alternatives

Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

Initially, consideration was given to smaller accommodation, including a number of smaller scale retreats. These however, proved not viable and the leading operator's preference was for a larger hotel. A more traditional 4-5 star hotel resort was also considered, however the location and market demographic did not support this kind of hotel due the unique location and minimal through traffic.

The current project has undergone three design iterations since the original conception stage, as follows:

- The original design included impacts to Lake Wellington with the creation of an internal lake and channel construction north of the Central Retreat.
- The revised design (reflected in the original planning application submission) included the removal of any connection to Lake Wellington and reduced the impact footprint of the development significantly.
- The current design has reduced environmental impacts further by relocating the villas further from woodland area and removing unnecessary access tracks.

Refer to Section 3.4.1 of the Environmental Impact Assessment at Attachment E.

Brief description of key alternatives to be further investigated (if known)**:**

Not applicable.

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

Consideration was given to a number of potential energy concepts, including the potential for a wind turbine. This however, requires further feasibility testing and will not be pursued at this stage. The wind turbine would operate as part of an embedded system supplying energy to the off-grid Retreat and infrastructure. No energy would be supplied to the grid.

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor)**:**

Seacombe West Pty Ltd.

Implementation timeframe:

Construction is targeted to commence in 2019 (subject to relevant approvals).

Operation targeted to commence early 2021.

Proposed staging (if applicable):

Not applicable.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

☐ No ☒ Yes If no, please describe area for investigation.
If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The subject site forms part of a much larger privately owned rural property (approximately 2481 hectares), known as 3215 Longford-Loch Sport Road. The project area is located at southern edge of Lake Wellington and comprises a site of approximately 91.5 hectares.

Topographically, the land is relatively flat and low-lying and is prone to flooding, with much of the project area comprising wetlands as water levels rise.

The project area is undeveloped, however a farm homestead and associated farm buildings are located to the south of the project area within the larger landholder, to the east of the main access track.

The project area was historically used for farming as part of the larger agricultural landholding. The former agricultural uses mean that the site is predominantly cleared of canopy cover, leaving predominantly low-lying vegetation, classified within three ecological vegetation classes (EVCs).

The landscape in this area has changed significantly in recent years, with increasing salinity from Lake Wellington. The rising lake levels and the growing salinity have caused extensive damage to the protective vegetation guarding the shoreline, which is now open to the erosive forces of the water. This has resulted in the area of works becoming seriously degraded due to the rising salinity.

Vehicular access is provided via an existing crossover and track from Longford-Loch Sport Road.

Refer to Section 3.3 of the Planning and urban Context Report for details of the site and surrounds at Attachment D.

Site area (if known): 91.5 (hectares), with an impact area of approximately 9 hectares.

Route length (for linear infrastructure) Not applicable.

Current land use and development:

The project area is undeveloped and formerly used for farming as part of the larger landholding. Land degradation as a result of salinity means that agricultural uses are no longer viable.

Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The project area located within a low-lying rural coastal environment surrounded by diverse ecosystems of the Gippsland Lakes system (including Ramsar wetlands) and Gippsland Coastal Park.

The small, rural settlement of Seacombe is located to the east of the site. This settlement comprises a number of scattered buildings, yet lacks community services or amenities. A number of settlements are located along the coast, with the subject site sitting in between Loch Sport (approximately 12km to the north-east) and Paradise Beach (approximately 11km to the south). These settlements contain limited services and facilities. Inland, Sale is the Shire's main town, providing a range of services and facilities, including education, medical and commercial. Sale is approximately 45km to the north-west from the project area.

The project area forms part of a large pocket of private farming land surrounded predominantly by public reserves. The proposed development is well separated from adjoining properties to the south, east and west, being located over 2 kilometres from adjoining land not in the same ownership.

Adjoining land is described as follows:

- **North** - The land to the north comprises Lake Wellington. Immediately north of the site at the foreshore is a small section of land zoned for Public Conservation and Resource, separating the subject site from the Lake.
- **South** - The land to the south is bounded by Longford-Loch Sport Road. To the south of this, the land is heavily vegetated and forms part of the Gippsland Lakes Coastal Park. The Coastal Park covers a long portion of the Ninety Mile Beach, from Seaspray to Lakes Entrance and is zoned for Public Conservation and Resource purposes.
- **East** - The land to the north-east of the subject site comprises lake reserve and swamplands within the Public Conservation and Resource Zone. Further to the south-east is a small pocket of farming land comprising semi-rural residential development along Seacombe Landing Road (over 4 kilometres away).
- **West** - The land to the west of the subject site forms a series of waterways, comprising Lake Coleman and the Lake Coleman Wildlife Reserve. The Reserve is separated from the proposed area of works by over 2 kilometres.

Refer to Section 3.1 and 3.2 of the Planning and urban Context Report for details of the site and surrounds at Attachment D.

Planning context (eg. strategic planning, zoning & overlays, management plans):

State policy supports the tourism industry in the Gippsland Region, encouraging suitably located and designed tourism opportunities to maximise employment and long-term economic, social and cultural benefits to the State. Local policy furthers this direction, seeking to encourage new opportunities for rural based tourism enterprises which are compatible with environmental and landscape characteristics of the area.

The subject site is located within the Farming Zone (FZ) pursuant to Clause 35.07.

The subject site is affected by the following overlays:

- Environmental Significance Overlay Schedule 1 (ESO1)
- Environmental Significance Overlay Schedule 2 (ESO2)
- Bushfire Management Overlay (BMO)
- Floodway Overlay (FO)
- Land Subject to Inundation Overlay (LSIO)

The following strategic documents are relevant:

- Plan Melbourne 2017-2050
- Victorian Coastal Strategy 2014

- Gippsland Regional Coastal Plan 2015-2020
- West Gippsland Regional Catchment Strategy 2013-2019
- West Gippsland Waterway Strategy 2014-2022
- West Gippsland Floodplain Management Strategy 2018-2027
- The Ramsar Convention
- Gippsland Lakes Ramsar Site Strategic Management Plan 2003

Refer to Section 6 of the Planning and urban Context Report for an outline of the planning policy context at Attachment D.

Local government area(s):

Wellington Shire.

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity
(cf. general description of project site/study area under section 7)**:**

Adjoining the north of the project area is Lake Wellington. Lake Wellington forms part of the Gippsland Lakes, which was listed as a Wetland of International Significance listed under the Ramsar Convention in 1982. Lake Wellington is one of four permanent deep and shallow water bodies in the Gippsland Lakes.

The study area is flat with subtle changes in topography that are reflected by a sharp transition in vegetation type between ephemeral wetlands in depressions, and scrub and woodland vegetation on the more elevated terrain.

The ephemeral wetlands within the study area are listed under the Department of Environment, Land, Water and Planning's (DELWPs) Current Wetlands layer as:

- Lake Coleman (Wetland ID 91036 and 91844); and,
- Unnamed Wetland (Wetland ID 91202).

There are no creeks or rivers within the study area, although artificial channels have been constructed to assist with drainage.

Refer to Section 1.3 of the Environmental Impact Assessment at Attachment E.

9. Land availability and control

Is the proposal on, or partly on, Crown land?

☒ No ☒ Yes If yes, please provide details.

The proposed works are not proposed on Crown land, however the site adjoins Crown land at the Lake foreshore.

Current land tenure (provide plan, if practicable):

The subject land is in private ownership, known as "Wellington Park".

Intended land tenure (tenure over or access to project land):

The Nunduk project area is intended to be subdivided from Wellington Park to create a separate title.

Other interests in affected land (eg. easements, native title claims):

N/A

10. Required approvals

State and Commonwealth approvals required for project components (if known):

Approval is required under the:

- *Planning and Environment Act 1987*
  A planning permit is required pursuant to the Wellington Planning Scheme for the following:
  - The use of a residential hotel under the Farming Zone at Clause 35.07
  - Buildings and works under the Farming Zone at Clause 35.07, the Environmental Significance Overlay, Schedule 1 and 2 at Clause 42.01, the Floodway Overlay at Clause 44.03 and the Land Subject to Inundation Overlay at Clause 44.04
  - Removal of vegetation under the Environmental Significance Overlay at Clause 42.01 and Native Vegetation at Clause 52.17
  - Alterations to a Road Zone Category 1 under Clause 52.29

  A planning application has been lodged with Wellington Shire Council.

- *Aboriginal Heritage Act 2006*
  A Cultural Heritage Management Plan (CHMP) has been prepared, which requires approval from Aboriginal Victoria. This is underway.

- *Environment Protection Act 1970*
  Treating >5000 L/day of wastewater onsite and discharging treated wastewater to the environment will require an EPA works approval. This will be obtained after approval of the planning application.

In terms of the *Environment Protection and Biodiversity Conservation Act 1999,* an assessment under the significant impact guidelines is provided in the previous ecological assessment by Ecology and Heritage Partners Pty Ltd. This assessment shows no criteria that would suggest the project would be a controlled action.

Refer to Section 5 of the Planning and Urban Context Report for an overview of legislation at Attachment D.

Refer to Section 4.1 and 4.2 of the Environmental Impact Assessment for an overview of the assessment criteria under the EE Act and the EPBC Act at Attachment E.

Have any applications for approval been lodged?

☐ No ☒ Yes If yes, please provide details.

The planning application has been lodged and is currently under assessment with Wellington Shire Council.

The CHMP has been approved by the RAP and on 24 July 2018, was lodged with Aboriginal Victoria (AV) for registration.

Approval agency consultation (agencies with whom the proposal has been discussed):

- Aboriginal Victoria (AV)
- Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC)
- Wellington Shire Council

Other agencies consulted:

The following agencies have been consulted pursuant to Section 55 of the *Planning and Environment Act 1987*:

- Environmental Protection Agency (EPA)
- Department of Environment, Land, Water and Planning (DELWP)
- VicRoads
- Transport for Victoria (TfV)
- Southern Rural Water (SRW)
- West Gippsland Catchment Management Authority (WGCMA)
- Country Fire Authority (CFA)

Other agencies consulted include:

- Regional Development Victoria
- Tourism Victoria and subsidiary entities
- LaTrobe Valley Authority
- Invest Victoria
- Invest Assist
- Tourism Australia

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

Native vegetation

Remnant patches of native vegetation are found throughout the site, as well as some exotic species introduced predominantly along access tracks. A native vegetation assessment has been undertaken by Ecology & Heritage Partners to establish the extent and quality of native vegetation impacted by the project.

A field assessment was undertaken by Ecology & Heritage Partners between the 17-19 October 2017. The assessment identified three Environmental Vegetation Classes (EVCs) within the study area, as follows:

- Damp Sands Herb-rich Woodland (EVC3) – Vulnerable
- Coastal Saltmarsh (EVC9) – Least Concern
- Estuarine Shrub (EVC953) – Endangered

Based on the current development footprint the project would result in the loss of 8.993 hectares of native vegetation (comprising 0.10 hectares of Damp Sands Herb-rich Woodland, 3.66 hectares of Coastal Saltmarsh, 3.22 hectares and 2.01 hectares of DELWP's modelled wetland). No scattered trees or large trees are proposed to be removed. The native vegetation removal will be appropriately offset, with offsets achieved through a first-party arrangement.

Refer to Section 12 of this Form and the Environmental Impact Assessment prepared by Ecology & Heritage Partners for full detail at Attachment E.

Flora and Fauna

As detailed in the Environmental Impact Assessment, a flora and fauna assessment was undertaken by BioUrbem between 11-14 May 2017 and 5-9 October 2017. No significant flora was identified during these surveys and there are no records for significant flora species within, or in close proximity to the study area. The lack of significant flora is largely accredited to the impacts of salinity and the historical agricultural impacts. As no significant species have been identified, impacts to significant flora as a result of the proposal are unlikely.

An Avifauna assessment was also undertaken by BioUrbem in May and October 2017. A total of 50 fauna species were recorded during these assessments, the majority being birds. Of these, the following nationally-significant and State-significant species were recorded:

- Common Tern, listed as Migratory under the EPBC Act
- Eastern Great Egret, listed as Threatened under the FFG Act

A search of records indicated that migratory shorebirds and wader birds have been recorded in large numbers in fringing wetlands around Lake Wellington. This included 16 nationally-threatened species within 10 kilometres of the study area. While the fringing wetlands and adjoining lakes provide important habitat for bird and amphibian species, the area of the proposed works is not considered to provide important habitat. Nonetheless, given the proximity of previous records, there is potential for significant species to occasionally use the ephemeral wetlands within the site and along the shoreline.

Despite the importance of Lake Wellington, the project area is not considered to provide important habitat for migratory shorebirds due to the lack of aquatic vegetation, the erosion of the foreshore and wave disturbance in this area. Regardless, if present, it is possible that migratory shorebirds may be disturbed by noise or visual impacts from the proposal. If so, it is anticipated that the birds would relocate along the shoreline to other areas of Lake Wellington. Given the size of Lake Wellington relative to the area impacted by the proposal, any disturbance to migratory shorebirds is expected to be insignificant.

In relation to other fauna, five non-bird species that are nationally threatened have been recorded within 10 kilometres of the study area. These comprise the New Holland Mouse, the Growling Grass Frog, the Green and Golden Bell Frog and two marine mammals that would not occur near the subject site. These species however, are considered unlikely to occur within the study area. Given the open-nature of the woodland habitat on site, there is considered to be a low potential for the New Holland Mouse to be present. Further, the salinity levels on site are considered too high to support amphibian species such as the Growling Grass Frog and the Green and Golden Bell Frog.

In summary, the proposal is considered unlikely to significantly impact any threatened flora and fauna species.

Refer to Section 12 of this Form and Section 2.3.4 of the Environmental Impact Assessment prepared by Ecology & Heritage Partners at Attachment E.

Acid Sulfate Soils

Coastal Acid Sulfate Soils (CASS) occur naturally in the area. Cardno undertook a preliminary geotechnical investigation in 2017 to assess the potential for CASS. Testing of soils observed at depths greater than 0.5 metres indicated that these soils were actual ASS and present risk of acid generation should they be disturbed or exposed.

A Preliminary Acid Sulfate Soil Hazard Assessment has been undertaken by Golder to assess potential impacts as a result of the project. The development has been designed to minimise ground impacts. The development will be elevated and constructed on driven piles (rather than bored), thereby ensuring low risk of disturbance of CASS. Further, the development will not impact the water table.

The proposal however, comprises a volume of fill to the roof of the Central Retreat that exceeds 100 cubic metres (at 112,500 cubic metres). The fill will be sourced from outside the site and will not comprise CASS, however given the volume alone, it is defined as a 'high risk activity' under the *Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulphate Soils* (DSE, 2010). No further activities identified present high risk.

The key risk of impacting CASS as a result of the fill on the roof of the Central Retreat would be a slip failure of the fill embankment, however risk of this is expected to be minimal as:

- The fill embankment will be appropriately designed by a geotechnical engineer and informed by geotechnical studies
- The embankment will be constructed by a suitably qualified contractor

Further assessment for the potential of CASS related issues will be undertaken during construction. If the assessment determines that there is a risk of exposure of CASS to the atmosphere a CASS Management Plan will be prepared.

Refer to the Preliminary Acid Sulfate Soil Hazard Assessment prepared by Golder at Attachment J.

Aboriginal Cultural Heritage

The proposal is located within an area of Aboriginal Cultural Heritage Sensitivity and represents a high impact activity. As such, A Cultural Heritage Management Plan (CHMP) has been prepared by Biosis to assess potential impacts to cultural heritage and detail management measures for the project.

The CHMP has been approved by the Registered Aboriginal Party (Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC)) and has been lodged with Aboriginal Victoria (AV) for registration.

A Desktop, Standard and Complex assessment was completed in the preparation of the CHMP. The desktop assessment identified two previously recorded placesd located on the foreshore of Lake Wellington (one of which has been destroyed by the erosion of the Lake's foreshore). The standard assessment identified two further areas of archaeological potential in the form of sandy

deposits. The complex assessment included subsurface testing, in which surface material and low density subsurface scatters of cultural material were identified along the Lake Wellington foreshore. No cultural heritage material was recorded across other areas studied.

The CHMP demonstrates that any impacts to cultural heritage as a result of the proposal can be appropriately managed with the inclusion of contingency plans, detailing measures should any unexpected Aboriginal cultural heritage material be found.

Refer to the CHMP prepared by Biosis provided at Attachment I.

Visual Amenity

Given the landscape sensitivity, there is potential for visual impacts during both the construction and operation phases of the project.

During construction, to minimise visual amenity impacts, all materials and equipment are to be confined to the designated areas on site. This includes mobile plant and equipment, car parking, stockpiles and waste collection points.

The introduction of built form in the open landscape will alter the appearance of the natural landscape. The Gippsland area has been identified as a significant landscape in the *Coastal Spaces Landscape Assessment Study, 2006*. The project area is located within the Gippsland Lakes Plains area, which is identified as comprising flat topography, providing open and expansive views. Lake Wellington is recognised in the Landscape Assessment as an important water feature in the landscape, with the interplay of the waterbody and the vegetated background making this landscape a valued resource.

The location of the project within this sensitive environment is paramount to the success of the project. By their nature, eco-resorts are located within sensitive landscapes and this environment is fundamental to the appeal of the Retreat and ultimately, it's feasibility. Relocating the project further inland is not an option.

The development will be visible from Lake Wellington, however it is located over 2 kilometres from any other public viewpoint and will not be readily perceivable from these distances. This includes over 2.5 kilometres from Longford-Loch Sport Road to the south and over 2 kilometres from the Lake Coleman Reserve to the west and the Gippsland Lakes Coastal Park to the east.

The project has been carefully designed to respect the landscape and minimise visual impacts when viewed from outside the site. The Central Retreat building, comprising the main built form, is covered by a green berm so that it is camouflaged from the southerly direction. Only from the shoreline at close range will the development be clearly read in profile.

Refer to Section 14 of this Form for further detail and the Planning and Urban Context Report prepared by Urbis at Attachment D.

Noise and Dust

Construction traffic and activities may cause dust and air quality impacts to neighbouring properties under particular weather conditions, however these impacts are expected to be negligible given the nearest residence is more than three kilometres away.

The key impacts are associated with vehicles bringing materials and equipment to site and with the use of vehicles, equipment and machinery during construction. Management measures are detailed in the EMP prepared by Aecom. These include compliance with EPA Guidelines for hours of construction and deliveries, management and response of noise complaints through the preparation of a Construction EMP, and dust suppression measures.

Refer to Section 7.1 of the EMP prepared by Aecom at Attachment F.

Water Quality and Wetlands

The project area is located to the south of Lake Wellington, which is a Ramsar Wetland of International Significance. The land also comprises ephemeral wetlands identified as Lake Coleman (Wetland ID 91036 and 91844) and Unnamed Wetland (Wetland ID 91202).

The project does not involve any direct impacts on Lake Wellington (e.g. infrastructure construction or channelling). Potential impacts to wetlands associated with surface water run-off, pollution from treated waste-water, disturbance of acid sulphate soils and irrigation of adjoining farming land will be addressed through a number of mitigation measures identified within the Environmental Management Plan prepared by Aecom. These include a Recycled Water Management Plan, an Acid Sulphate Management Plan (if required), a Stormwater Management Plan and a Land Capability Analysis.

Further, the proposal will not interact with groundwater. The majority of stormwater run-off is proposed to be captured and it is unlikely that significant runoff will occur due the permeable nature of the existing sandy ground. A Stormwater Management Plan prepared prior to commencement of development to detail stormwater management measures and ensure water quality is not impacted.

The design of the development, coupled with the mitigation measures within the sub-plans of the EMP will ensure impacts to water quality and wetlands are appropriately managed.

Refer to Section 13 of this Form and the Environmental Impact Assessment prepared by Ecology & Heritage Partners at Attachment E.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

☒ NYD ☒ No ☒ Yes If yes, answer the following questions and attach details.

Ecology and Heritage Partners undertook an Environmental Impact Assessment in July 2018 (Ecology and Heritage Partners 2018), which provided results of a Native Vegetation Assessment (NVA) of the project area that was undertaken in October 2017. The NVA was undertaken to establish the extent and quality of native vegetation in accordance with Victoria's *Guidelines for the removal, destruction or lopping of native vegetation* 'the Guidelines' (DELWP 2017) and the Vegetation Quality Assessment manual (DSE 2004).

A likelihood of occurrence assessment was undertaken for significant flora that have previously been documented within the local area (i.e. VBA or ALA data). This included significant species including listed species recorded within a 10-kilometre radius of the study area, or identified in the Protect Matters Search Tool (DoEE 2018).

Refer to the Environmental Impact Assessment at Attachment E.

What is the maximum area of native vegetation that may need to be cleared?

☒ NYD Estimated area 8.993 (hectares)

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

☒ N/A

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

☒ NYD ☒ Preliminary/detailed assessment completed. If assessed, please list.

There are three Ecological Vegetation Classes within the site, including:

- EVC 9 Coastal Saltmarsh;
- EVC 953 Estuarine Scrub; and
- EVC 3 Damp-sands Herb-rich Woodland.

The proposed development will result in the proposed removal of 8.993 hectares of remnant native vegetation. A summary of the native vegetation within the study area and proposed extent of impact to EVC is as follows:

In the study area:

- Damp Sands Herb-rich Woodland (EVC3) = 4.06 hectares
- Coastal Saltmarsh (EVC9) = 32.22 hectares
- Estuarine Shrub (EVC953) = 38.34 hectares

In the impact area:

- Damp Sands Herb-rich Woodland (EVC3) = 0.10 hectares
- Coastal Saltmarsh (EVC9) = 3.66 hectares
- Estuarine Shrub (EVC953) = 3.22 hectares

The project has been sited to minimise impacts to native vegetation. Since original project conception, the footprint of the development has been significantly reduced to minimise impacts. The changes made to avoid vegetation and minimise impacts on most sensitive vegetation include:

- The removal of an internal lake that was originally proposed and preservation of the shoreline of Lake Wellington.
- The relocation of the main retreat building to utilise the land most impacted by salinity and minimise impacts to native vegetation.
- The micro-siting of villas to avoid impacts to Damp Sands Herb-rich Woodland, including avoidance of impacts to large Gippsland Red-gums.

The above changes resulted have resulted a reduction in native vegetation removal of over 80% from the original project design.

Have potential vegetation offsets been identified as yet?

☐ NYD ☒ Yes If yes, please briefly describe.

Offset requirements have been calculated by DELWP and identified as follows:

Pacific Golden Plover (9.809 specific units), Eastern Curlew (9.306 specific units), Whimbrel (10.815 specific units), Grey-tailed Tattler (10.669 specific units), Common Sandpiper (9.085 specific units), Common Greenshank (10.769 specific units), Marsh Sandpiper (9.547 specific units), Red Knot (10.740 specific units), Great Knot (10.709 specific units), Australasian Shoveler (9.958 specific units), Freckled Duck (9.818 specific units), Blue-billed Duck (9.904 specific units), Musk Duck (9.842 specific units), White-bellied Sea-eagle (10.728 specific units), Ruddy Turnstone (6.789 specific units), Lesser Sand Plover (9.821 specific units), Terek Sandpiper (10.615 specific units), Marsh Saltbush (9.903 specific units), Grey Mangrove (9.903 specific units), Creeping Rush (9.903 specific units), Ribbed Thryptomene (9.590 specific units), Bluish Pigface (5.687 specific units), Eastern Water-ribbons (9.437 specific units); Tiny Arrowgrass (5.946 specific units).

All of the required State biodiversity offsets for the project can be met on the same property (i.e. areas not proposed to be impacted by the development will be secured and managed as an offset to compensate for the permitted removal of native vegetation).

Refer to Section 2.4.1 of the Environmental Impact Assessment at Attachment E.

Other information/comments? (eg. accuracy of information)

Information is reliable as surveys were undertaken at appropriate times of year and duration by qualified ecologists.

NYD = not yet determined

Flora and fauna

What investigations of flora and fauna in the project area have been done?
(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

Ecology and Heritage Partners undertook an Environmental Impact Assessment in July 2018. The purpose of the EIA was to assess the impacts of the project on significant flora and fauna values including native vegetation, wetlands, and threatened species and -ecological communities, and determine the required environmental permits and approvals under relevant environmental legislation and policy.

As part of the scope of works Ecology and Heritage Partners Pty Ltd were requested to complete the following tasks:

- Desktop review of relevant biodiversity databases, such as the Victorian Biodiversity Atlas and Protected Matters Search Tool
- Review previous ecological assessments completed for the project including the avifauna and threatened flora assessment completed by BioUrbem (2017)
- Review engineering, hydrological, environmental and traffic reports completed for the project which are relevant to the EIA
- Review threatened and migratory shorebird monitoring records for Lake Wellington collected by Birdlife Australia'
- Assess native vegetation extent and quality in accordance with the habitat hectares method
- Calculate permit and offset requirements for removal of native vegetation in accordance with Victoria's 'Guidelines for the removal, destruction, or lopping of native vegetation' (DELWP 2017a)
- Determine the area required on site to establish a first-party offset site that can provide all the offsets required for the project in accordance with Victoria's 'Guidelines for the removal, destruction, or lopping of native vegetation' (DELWP 2017a)

- Complete a risk assessment of potential ecological impacts of the project, including to native vegetation, threatened species, threatened ecological communities, migratory birds and other sensitive ecological values
- Report on the implications of project under relevant environmental legislation and policy
- Demonstrate steps taken by the client to avoid and minimise impacts to native vegetation, and recommend any further steps to be taken during the construction phase of the project.

The general flora and fauna assessment was undertaken to determine the diversity of native and introduced species across the study area. The flora surveys were completed by BioUrbem over four days in May 2017, and five days in October 2017 (BioUrbem 2017).

Within each of the three recorded EVCs, a 900 metre transect was established with a one metre square quadrat established ever 50 metre intervals along each transect (total of 20 quadrats per transect). All vascular flora was identified within the quadrats. The general fauna surveys involved recording all fauna species observed during the diurnal site visits.

Avifauna surveys were conducted along 900 metre transects throughout the study area covering the different areas of suitable habitat. Surveys were conducted at 100 metre intervals (total of 10 surveys per transect and 85 surveys for the entire study area). At each point, surveyors conducted point surveys drawing an imaginary circle with a radius of 20 metres, and recording every bird observed within the circle. In addition, all other bird species that could be identified were also noted. Surveys were completed between sunrise and 11 am by BioUrbem.

One State-significant fauna species (Eastern Great Egret) was recorded during the avifauna species. The species is listed as Threatened under the FFG Act, and Vulnerable under the Victorian Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2013). It was recorded in Estuarine Scrub during the May survey. One nationally-significant fauna species was recorded during the avifauna assessment, Common Tern *Sterna hirundo.* The species is listed as Migratory under the EPBC Act, and was recorded during the October avifauna survey on water-bodies in Coastal Saltmarsh and in Estuarine Scrub.

Two State-significant species (Emu *Dromaius novaehollandiae* and Australian Shoveler *Anas rhynchotis*) have been recorded (both records from 1981) in Lake Wellington, directly adjoining the study area. There are also several records of White-bellied Sea-eagle *Haliaeetus leucaogaster* in the general vicinity of the study area. The species is likely to regularly flyover the shores of Lake Wellington and inland areas. Further, State-significant fauna species have been recorded recently at the Morley Swamp, Salt Lake-Backwater Morass and Tucker Swamp (DELWP 2018c; BLA 2018a, BLA 2018b).

A native vegetation assessment was undertaken to establish the extent and quality of native vegetation in accordance with Victoria's *Guidelines for the removal, destruction or lopping of native vegetation* 'the Guidelines' (DELWP 2017a) and the Vegetation Quality Assessment manual (DSE 2004). All patches of native vegetation were assessed against the condition thresholds/listing statements for threatened ecological communities listed under Commonwealth and State environmental legislation and policy.

No significant flora was recorded during the field assessments and there are no records for significant flora species within, or in close proximity to the study area (VBA 2018).

Have any threatened or migratory species or listed communities been recorded from the local area?

☒ NYD ☒ No ☒ Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

One migratory species (Common Tern) was recorded during the avifauna assessment, which was detected on waterbodies in Coastal Saltmarsh and in Estuarine Scrub.

Five non-bird species that are nationally threatened have been recorded within the 10 kilometres of the study area (from desktop assessments). Two of these species are marine mammals (Southern Elephant Seal *Mirounga leonina* and Southern Right Whale *Eubalaena australis*) that

would not occur in the study area (i.e. pelagic species). The other three species are New Holland Mouse *Pseuodmys novaehollandiae,* Growling Grass Frog *Litoria raniformis* and Green and Golden Bell Frog *Litoria aurea.*

New Holland Mouse has been recorded in the nearby Gippsland Lakes Coastal Park with records 2.5 – 5 kilometres south and south-east of the study area. The species occurs in heathland and heathy-woodland along coastal areas, with high floristic diversity, typically with dense low-vegetation to provide refuge from predators. The population at Gippsland Lakes Coastal Park is found in woodland dominated by Saw Banksia *Banksia serrata*/Shinning Peppermint *Eucalyptus willisii* and heathland dominated by Heath-tree *Leptospermum myrsinoides* (DSE 2003). Given the lack of suitable habitat, there is a low potential for the species to occur in the study area. While patches of Damp-sands Herb-rich Woodland are present, the understorey and ground-layer is unsuitable (too open) for New Holland Mouse. Further, Damp-sands Herb-rich Woodland has low floristic diversity and not considered to provide the suite of food plants (e.g. seeds from native legumes) that New Holland Mouse requires.

Salinity levels within Lake Wellington are considered too high to support amphibian species. Salinity levels within Lake Wellington measured from a bore near the study area recorded salinity levels varying between 5 and 20 parts per thousand (ppt) over the past 10 years (Arms 2018). However, there is a very low probability of **Growling Grass Frog** occurring in waterbodies with salinity levels above 1 ppt, while **Green and Golden Bell Frog** does not typically persist in waterbodies with salinity levels above 5 ppt (Christy and Dickman 2002). However, both species has been recorded in wetlands fringing Lake Wellington, including at the Saltwater-Backwater Morass, by Wildlife Unlimited at Dutsons Downs in 2011 and by Greening Australia in 2014 near Marlay. There are no records for Growling Grass Frog within 10 kilometres of the study area since 1978, although resident populations are known to persist (recent records from 2017) at Clydebank, located near the north-western edge of Lake Wellington (A. Organ pers. comm.).

Coastal Saltmarsh within the study area qualifies as the EPBC Act-listed Subtropical and Temperate Coastal Saltmarsh, which has a listing status of Vulnerable.

The proposed action will not impact any properties listed for World Heritage or listed for national heritage. The study area is located on the banks of Gippsland Lakes, a Wetland of International Significance. The project will not directly impact the adjoining Lake Wellington, and indirect impacts (e.g. pollution from wastewater treatment, salinisation, surface-water flows) will be mitigated via engineering solutions (e.g. lining of water storage areas, infiltration swales for stormwater), and management (Land Capability Analysis for irrigated farm-land).

Threatened species have potential to occur in areas adjoining the project footprint although listed species are unlikely to be impacted.

Lake Wellington is considered habitat for migratory species (i.e. birds). Although migratory shorebirds listed under the EPBC Act are likely to occur within the study area and adjacent areas infrequently, the study area is not likely to support an ecological significant population of any migratory species.

However, the loss of the community is not considered as a significant impact under the EPBC Act. Locally the Coastal Saltmarsh has a conservation status of least concern. Further, much of the Coastal Saltmarsh in the study area is believed to have established from rising salinity levels over the past 15-30 years.

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

The loss of native vegetation associated with the proposed development is the main threatening process. There is also a low risk of introduction of pathogens (i.e. *Phytophthora cinnamomi*), water pollution, water quantity and quality in Lake Wellington, although mitigation measures will be implemented to prevent these (Ecology and Heritage Partners 2018, Section 3.3, Table 10).

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

☐ NYD ☐ No ☒ Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

One nationally-significant fauna species was recorded during the assessment, Common Tern *Sterna hirundo.* The species is listed as Migratory under the EPBC Act, and was recorded during the October avifauna survey on waterbodies in Coastal Saltmarsh and in Estuarine Scrub. There is a high likelihood for the Common Tern to occur within the site (EHP 2018).

Given the proximity of previous records of significant and migratory species, there is potential that a small number of these species may occasionally use ephemeral wetlands within the study area or along the shoreline of Lake Wellington. It is assessed that the project is unlikely to have a significant impact on any listed migratory species, as the study area and adjoining sections of Lake Wellington are not likely to constitute 'important habitat' as defined under the EPBC Act.

Is mitigation of potential effects on indigenous flora and fauna proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The project would impact on approximately 9 hectares of native vegetation. The footprint of the project has been significantly reduced during the design process reducing impacts to native vegetation and avoiding impacts to Lake Wellington. This has included a reduction in the extent of Estuarine Scrub removal (an Endangered EVC) removal to 4.21 hectares, and micro-siting the location of the villas to avoid impacts to large trees.

Through the process of project refinement, the following environmental benefits have been achieved:

- Approximately 80% reduction in native vegetation removals (and possibly even greater when accounting for changes in Current Wetland area);
- Preservation of Damp-sands Herb-rich Woodland EVC, a locally rare EVC with important habitat features namely large Gippsland Red-gum trees; and,
- Preservation of the shoreline of Lake Wellington by jettisoning the internal lake and channel.

The EMP prepared by Aecom details management plans that will ensure environmental impacts are appropriately managed. These plans include:

- Construction Environmental Management Plan
- Water Quality and Soil Erosion Management Plan
- Recycled Water Management Plan
- Land Capability Analysis
- Acid Sulphate Management Plan (if required)
- Stormwater Management Plan
- Cultural Heritage Management Plan
- Traffic Management Plan
- Contaminated Land Management Plan
- Chemical and Fuel Storage Management Plan
- Waste Management Plan
- Water Quality and Soil Erosion Management Plan
- Emergency Response Plan

Other information/comments? (eg. accuracy of information)

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)?

☐ NYD ☒ No ☐ Yes If yes, indicate approximate volume and likely source.

Will the project discharge waste water or runoff to water environments?

☐ NYD ☒ No ☐ Yes If yes, specify types of discharges and which environments.

The total annual production of wastewater is anticipated at 8,404,777 L/year. Wastewater will be collected from the Central Retreat and villas using localised pump wells and a small-bore pressure sewer network. This will then be reticulated to the wastewater treatment plant located within the Infrastructure Area. The wastewater will be treated to the equivalent of class C (EPA-Vic) using passive reedbed treatment technology.

The treated wastewater from the Retreat and villas will be supplied to the adjacent farm for irrigation of pasture. A winter storage will be provided to enable storage of treated wastewater over the winter period when irrigation on the farm may not be required. The irrigation will be managed in line with EPA requirements. A Land Capability Assessment and Recycled Water Management Plan will be prepared to ensure safe use of treated wastewater.

Refer to the Integrated Water Cycle Management Strategy at Attachment G.

Are any waterways, wetlands, estuaries or marine environments likely to be affected?

☐ NYD ☐ No ☒ Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

The proposal will impact ephemeral wetlands within the project area, however these impacts will be appropriately managed through the EMP.

Refer to Section 7 of the EMP for measures to manage key risks. Specifically, Section 7.4 for a discussion on CASS and hydrogeology, 7.5 for contamination, Section 7.6 for waste and Section 7.7 for discussion of water quality and soil erosion.

Are any of these water environments likely to support threatened or migratory species?

☐ NYD ☐ No ☒ Yes If yes, specify which water environments.

Given the proximity of previous records of significant and migratory species, there is potential that a small number of these species may occasionally use ephemeral wetlands within the study area or along the shoreline of Lake Wellington. It is assessed that the project is unlikely to have a significant impact on any listed migratory species, as the study area and adjoining sections of Lake Wellington are not likely to constitute 'important habitat' as defined under the EPBC Act.

The salinity of the wetlands is considered too high for Growling Grass Frog and Green and Golden Bell Frog. There are no suitable breeding sites within the study area for either of these species.

Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'?

☐ NYD ☐ No ☒ Yes If yes, please specify.

The project area adjoins Lake Wellington, which is listed as a Ramsar Wetland of International Significance. The development is setback 120 metres from the Lake foreshore. It will have no direct impacts on Lake Wellington and has been designed to avoid impacts to Lake Wellington.

Potential impacts to wetlands as a result of surface water run-off, pollution from treated waste-water, disturbance of acid sulphate soils and irrigation of adjoining farming land will be addressed through a number of mitigation measures, including a Recycled Water Management Plan, potential Acid Sulphate Management Plan if required, Stormwater Management Plan and Land Capability Analysis. These plans are outlined in the EMP.

Further, potential impacts as a result of wastewater treatment will be thoroughly detailed, managed and mitigated through the works approval process, which will be undertaken post planning approval.

Could the project affect streamflows?

☐ NYD ☒ No ☐ Yes If yes, briefly describe implications for streamflows.

There are no local streams that would be impacted.

There could be potential for indirect impacts to Lake Wellington through changes to conveyance or storage during flood events. The site however, does not convey flood waters and thus there is no impact on conveyance. Any impact on storage of flood waters in the system is proportional to the area of proposed buildings (0.1 km2) compared to the total area of the Lake Wellington floodplain (150 km2). The impact of the development on flood storage is thus insignificant (less than 0.01%, well below the accuracy and sensitivity of flood modelling).

Refer to the Flooding and Hydrodynamics Report at Attachment L.

Could regional groundwater resources be affected by the project?

☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Could environmental values (beneficial uses) of water environments be affected?

☐ NYD ☒ No ☐ Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

Unlike the freshwater wetlands and morasses fringing Lake Wellington elsewhere, the wetlands within the study area are highly saline and ephemeral and provide limited environmental values. There are limited fauna groups that utilise the wetlands and vegetation is either dominated by one or two halophytic species or consists of large areas of bare ground.

Could aquatic, estuarine or marine ecosystems be affected by the project?

☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Wetlands within the study area have not been considered as part of the offset strategy, although will be protected under a Section 69 agreement of the *Conservation Forest and Lands Act 1987* and managed to preserve and improve environmental values. Unlike the freshwater wetlands and morasses fringing Lake Wellington elsewhere, the wetlands within the project area provide limited environmental values due to salinity.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?

☒ No ☐ Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.

Is mitigation of potential effects on water environments proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The development has been designed to mitigate impacts on water environments. The detail will be further developed within the Recycled Water Management Plan, Stormwater Management Plan and Land Capability Analysis prepared as part of the EMP.

Other information/comments? (eg. accuracy of information)

14. Landscape and soils

Landscape

Has a preliminary landscape assessment been prepared?

☒ No ☐ Yes If yes, please attach.

Is the project to be located either within or near an area that is:

- **Subject to a Landscape Significance Overlay or Environmental Significance Overlay?**

☐ NYD ☐ No ☒ Yes If yes, provide plan showing footprint relative to overlay.

The land is subject to two Environmental Significance Overlays, as follows:

- Environmental Significance Overlay - Schedule 1 (ESO1)
  ESO1 refers to the Coastal and Gippsland Lakes Environs area and its environmental significance, recognising that there are significant environmental issues in this area, including water quality, flooding, groundwater contamination and the vulnerability of coastal systems.

- Environmental Significance Overlay – Schedule 2 (ESO2)
  ESO2 refers to Wetlands and their environmental significance, recognising that wetlands are one of the most productive and diverse biological systems in the world and are a valuable resource for recreational activities.

The decision guidelines of each ESO are outlined following, as well as a response to each.

ESO1 Decision Guidelines and Response

- *Incorporates stormwater systems which prevent high nutrient and sediment concentration entering waterways, wetlands and groundwater*
  The majority of stormwater run-off is proposed to be captured and it is unlikely that significant runoff will occur due the permeable nature of the existing sandy ground. Water from roofs will be directed to stormwater treatment systems to prevent high nutrient and sediment concentration entering waterways, natural wetlands and groundwater. The development includes a total of 1500m3 of rainwater reuse/detention tanks designed to capture the majority of stormwater runoff. Stormwater from hardsurfaces, such as roads will run through swales and treated through natural soil processes. A Stormwater Management Plan prepared prior to commencement of development to detail stormwater management measures and ensure water quality is not impacted.

- *Avoids the discharge of wastes unless it can be demonstrated that the wastes can be assimilated without detrimental effect to the receiving environment*
  Wastewater will be collected and treated in line with EPA requirements. A Land Capability Assessment and Recycled Water Management Plan will be prepared to ensure safe use of treated wastewater. Further, treating the wastewater onsite and discharging treated wastewater requires an EPA works approval, which will be obtained after approval of the planning application.

- *Avoids and/or controls waste discharges to areas of high conservation significance*
  Refer above.

- *Complements the scale, height, colour, materials, and finishes of buildings with the coastal environment and any identified local settlement character, with the intent of minimising any visual impact, including visual impact as seen from the water*
  The development has been carefully designed to minimise visual impacts. Refer to 'mitigation of potential landscape effects' below.

- *Minimises ground surface disturbance*
  The development has been designed to minimise construction activities and impacts being constructed by driven piles. Thus, it will not include excavation such as digging, tunnelling, removal of material, scooping, cutting, trenching, drilling, boring or other activity that will result in the movement of earth.

- *Minimises the impact of construction (including construction of roads) within prominent areas such as hillsides, promontories, ridge-lines and headlands*
  The topography of the land is flat and the development has been sited back from the foreshore to minimise visual impacts.

- *Avoids the construction (including construction of roads) and works in fragile or unstable areas, including land subject to inundation and land adjoining coastal or lake foreshore boundaries*
  The development is located within an area subject to inundation. This location is fundamental to the success of the project and therefore, construction within this area cannot be avoided. The impact of flooding has been considered within the Flooding and Hydrodynamics Report at Attachment L and future plans prepared as part of the EMP, including a Construction Environmental Management Plan and Water Quality and Soil Erosion Management Plan will ensure construction impacts are appropriately managed and mitigated if required.

- *Protects sensitive coastal and foreshore vegetation, in particular heath-lands and dune vegetation, from clearing, pollution, grazing, and trampling*
  The development has been sited to minimise impacts to significant native vegetation. All vegetation lost will be appropriately offset to ensure no net loss to Victoria's biodiversity.

- *Emphasises the use of indigenous species in revegetation programs*
  Revegetation of coastal saltmarsh, estuarine scrub and woodland vegetation is integral to the design approach. The proposed landscape concept is based on these EVCs, proposing to revegetate any areas impacted with the corresponding EVC. Site sourced seed will be used for all new vegetation to ensure ecological integrity in the landscaping. Refer to the Landscape Report at Attachment C.

- *Takes into account coastal processes for all construction and development on the coast*
  The construction activities will be minimised in response to the sensitive coastal environment. The preparation of the Construction Environmental Management Plan and other sub-plans within the EMP will ensure construction activities are appropriately managed.

- *Takes into account possible sea and water level rises when planning the siting and design of buildings and works*
  The development has been designed in response to future flooding predictions. The finished floor levels are at RL3.3 metres and the access road is raised where required to ensure permanent dry access for vehicles during flood events to RL2.2. This ensure that the development not only responds to current and envisaged future flood levels but also provides an additional level of protection above that required in policy. Refer to the Flooding and Hydrodynamics Report at Attachment L.

- *Avoids development with any associated wastewater within 100 metres of a waterway, wetland, coastal foreshore boundary or lake foreshore boundary*
  The siting of the development atop ephemeral wetlands cannot be avoided. A Land Capability Assessment and Recycled Water Management Plan will be prepared and an EPA works approval will be obtained. These plans and approvals will ensure that any potential wastewater impacts are appropriately mitigated.

- *Enables the built form of commercial and community facilities to reflect the individual character of the settlement within which it is to be developed*
  The design of the development responds directly to its landscape setting. The building has strong horizontal planes folding down into the landscape and a landscaped roof camouflaging the building in part and complementing the natural landscape and the vastness of the lake.

- *Ensures that the scale, height and materials of buildings complements the coastal environment and local township character*
  The most prominent building is the Central Retreat. The building height varies as the form folds, with a maximum height of 16.95 metres above natural ground. The villas have a height up to 8.7 metres and the infrastructure roof up to 8.4 metres. Colours and

materials will be muted in tone and will be non-reflective, ensuring the building sits comfortably in the natural landscape.

- *Includes provision for the retention of vegetation and fauna habitat, the need to revegetate riparian buffers along waterways, gullies, ridge-lines, property boundaries and recharge areas, as well as site management measures to minimise the occurrence of salinity, erosion, groundwater and surface water problems for applications for agricultural use or development*
  Significant vegetation has been retained where possible and any loss will be appropriately offset with indigenous vegetation. Management measures will be included within the EMP and sub-plans ensuring potential environmental issues are appropriately managed.

ESO2 Decision Guidelines and Response

- *The integrity and long-term ecological and hydrological functioning of the wetland and areas surrounding the wetland*
  The proposal is not expected to impact the strategic ecological and hydrological functioning of the wetlands. Refer to the Environmental Impact Assessment at Attachment E.

- *The contribution of the proposal towards the ecological restoration of the wetland, or the potential for the proposal to reduce the capability for ecological restoration of the wetland*
  Salinity will continue to be an issue for the land, however the proposal has the potential to regenerate the wetland through the planting of healthy indigenous species.

- *The benefit of requiring an agreement with the owner of the land under the Planning and Environment Act 1987, Wildlife Act 1975, Conservation, Forests and Lands Act 1987, or any other Act, to further protect or enhance the wetland and its flora and fauna.*
  The project has been designed to minimise impacts to the wetland environment and therefore, no agreement is considered necessary.

Refer to Section 6.2.2 of the Planning and Urban Context Report at Attachment D for figures and further detail of the ESOs.

- **Identified as of regional or State significance in a reputable study of landscape values?**
  ☒ NYD ☒ No ☒ Yes If yes, please specify.

The Gippsland area has been identified as a significant landscape in the Coastal Spaces Landscape Assessment Study, 2006. The project area is located within the Gippsland Lakes Plains area, which is detailed in the Study as:

'This is a flat to gently undulating mostly pastoral Character Area adjoining the Gippsland Lakes. Large inland waterbodies including Lake King, Lake Victoria and Lake Wellington are the major landscape features, the edges of which are locations of increasing pressure for recreational uses and settlements. Very flat topography provides open and expansive views. Although there are few topographic features to break up the expansive plains, scattered vegetation and settlements create points of variation to the character.'

- **Within or adjoining land reserved under the *National Parks Act 1975* ?**
  ☒ NYD ☒ No ☒ Yes If yes, please specify.

The project area is not within or adjoining land reserved as a National Park, however surrounding land is reserved under the Act, as follows:

- the Lake Coleman Wildlife Reserve to the west (over 2 kilometres from the project area)
- the Gippsland Lakes Coastal Park to the east (over 2 kilometres from the project area)

- **Within or adjoining other public land used for conservation or recreational purposes ?**
  ☒ NYD ☒ No ☒ Yes If yes, please specify.

The project area adjoins the Lake Wellington foreshore, which is zoned for Public Conservation and Recreation. The project area is located over 2 kilometres from land zoned for Public Conservation and Recreation to the south, east and west.

Is any clearing vegetation or alteration of landforms likely to affect landscape values?

☐ NYD ☒ No ☐ Yes If yes, please briefly describe.

The vegetation removal proposed comprises low-lying vegetation that does not contribute significantly to the visual landscape amenity.

Is there a potential for effects on landscape values of regional or State importance?

☐ NYD ☐ No ☒ Yes Please briefly explain response.

The project land and wider surrounds comprise relatively flat topography and an exposed landscape. The project will unavoidably alter this landscape with the introduction of development. In response, the development has been designed of high architectural quality and innovative built form and is of an appropriate scale and form to minimise visual impacts on this sensitive landscape.

Is mitigation of potential landscape effects proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

By their nature, eco-resorts are located within sensitive landscapes and this environment is paramount to the appeal and ultimate success of the project. As it is not feasible to relocate the proposal outside the sensitive landscape, the development has been designed to complement the environment, as follows:

- The development has been sited to avoid visual impacts from the main 'touring route' being Longford-Loch Sport Road. Located approximately 2.5 kilometres from the Road, the proposal will have no impact from public view points to the south and will not be seen from the coast. When viewed from the south, the Central Retreat is concealed by a folding earth mound. The villas are set behind a woodland area, further screening views to this element of the development. The infrastructure zone comprises predominantly open built form, with the exception of the staff accommodation, the tanks and associated sheds, thereby allowing views through and minimising visual impacts in the open landscape. When viewed from the public realm to the south the development will not be readily perceivable by the naked eye.
- The development will be visible from public view points around the foreshore of Lake Wellington and from on the Lake. As such, the Retreat has been sensitively designed to complement the foreshore environment and enhance visual interest. The development will contribute to the sensitive landscape and will not appear visually obtrusive, as follows:
  - Key public points along the Lake's foreshore include Rosneath Park to the north-east and the Lake Wellington Yacht Club to the north-west. The development is located over 6.5 kilometres from Rosneath Park and approximately 13 kilometres from the Lake Wellington Yacht Club. Given the distance and expanse of the lake, when viewed from key public points, the development will not be readily perceivable.
  - When viewed at closer range by users of the lake, the development, specifically the Central Retreat building will be apparent. The building has a total length of approximately 280 metres and a height of approximately 17 metres. To minimise visual impacts and sit comfortably in the landscape when viewed from the north, the development includes:
    - A layout sited on an angle, with the Central Retreat setback 120 metres to the lake foreshore at the closest western point and over 230 metres at the eastern point, lessening the impact of views over the length.
    - The integration of landscape and architecture, with the strong horizontal planes of the Central Retreat folding down into the landscape at each side and a landscaped roof camouflaging the building in part and complementing the natural landscape.
    - Architecture that is purposefully raw and textural. The horizontal expression complements the flat topography of the saltmash and the vastness of the lake.

- External finishes that that reduce distant visibility. Colours and materials are muted in tone and will be non-reflective, further minimising visual impacts.

- The design and construction of the Retreat minimises ground impacts, with buildings elevated and building footprints and impact areas minimised to support vegetation growth. The layout of the development has avoided the removal of canopy cover, retaining trees that contribute to the visual amenity of the landscape. Further, replacement planting utilises indigenous vegetation to match existing environmental vegetation classes.

Other information/comments? (eg. accuracy of information)

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

Cardno undertook a preliminary geotechnical investigation in 2017, in which testing of soils observed at depths greater than 0.5 metres indicated that these soils were actual acid sulfate soils and present risk of acid generation should they be disturbed or exposed.

A Preliminary Acid Sulfate Soil Hazard Assessment has been undertaken by Golder to assess potential impacts to coastal acid sulfate soils (CASS). The proposal comprises a volume of fill (to the rear/roof of the Central Retreat) that exceeds 100 cubic metres and therefore represents a 'high risk activity' as defined by the *Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulphate Soils* (DSE, 2010).

The proposal has been designed and will be constructed so that the development will not disturb CASS nor impact the water table. Of note, the development will be elevated and supported by driven piles, rather than excavated foundations. Further, services will be suspended from raised accessways to avoid the need for excavation or trenching, thereby minimising ground disturbance.

Refer to the Preliminary Acid Sulfate Soil Hazard Assessment at Attachment J.

Are there geotechnical hazards that may either affect the project or be affected by it?

☐ NYD ☒ No ☐ Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

The EPA has reviewed the proposal and the Preliminary Acid Sulfate Soil Hazard Assessment and, in their referral comments dated 4 October 2018, confirmed they have no objection to the proposal subject to conditions. Conditions require further assessment of CASS during earthworks and a management plan to be prepared if the assessment determines that there is a risk of exposure of CASS to the atmosphere.

15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

☐ NYD ☒ No ☐ Yes If yes, provide estimate of traffic volume(s) if practicable.

Traffic impacts will be minimal. In terms of construction, traffic volumes will be reduced due to the proposed use of prefabricated modules for the building, reducing the number of vehicles required for different construction materials. A complete analysis of traffic impact during construction will be undertaken within a Construction Traffic Management Plan which will be prepared and approved by the responsible authority prior to construction. If any mitigation measures are required, these will be identified in the Management Plan.

Construction will occur prior to the retreat opening up to visitors and employees, so will not create an increase in proposed post completion traffic volumes. In terms of operation, Cardno have undertaken a preliminary traffic assessment of the proposal and found that when operating at maximum capacity, the development is anticipated to generate approximately 413 vehicles per weekday, with approximately 68 vehicle movements per peak hour.

The RTA Guide to Traffic Generation Developments recommends traffic generation rates of 3 vehicle movements per day for hotel accommodation. Peak hour traffic generation rates are set at 0.4 vehicle movements per peak hour. Staff numbers are proposed at between 80-120. With shift times to vary throughout the day it is expected that approximately 1/3 of the maximum staff numbers (40 staff) would use the access points during the peak periods.
Assuming that all staff will have to travel by vehicle to the site, typical traffic generation rates are shown as follows:

Type of Development	No.	Daily Generation Rate	Daily Traffic Generation	Peak Hour Generation Rate	Peak Hour Traffic Generation
Hotel/ Motel Accommodation	71	3 Trips per day	213 Trips per day	0.4 Trips per peak hour	28 Trips
Staff	100	2 Trips per day	200 Trips per day	1 Trip per peak hour	40 Trips
Total		**413 Trips per day**			**68 Per peak hour**

These movements will be distributed along Longford-Loch Sport Road. This would equate to approximately one vehicle movement per minute in the peak hour. Longford-Loch Sport road is an arterial road with good capacity. For 2017, VicRoads estimated the annual average daily traffic volume for Longford-Loch Sport Road as 790 vehicles for both east and west bound (1580 two-way). Thus, the proposal is considered to have minimal effects on the function of Longford-Loch Sport Road and the local road network. Further analysis of the traffic impact will be detailed within a Traffic Management Plan that would be prepared by to commencement of works.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

Noise and dust impacts are expected to be negligible, with the closest residence over 3 kilometres from the project area. The EMP details mitigation measures for dust suppression and A noise management strategy will be developed as part of the CEMP.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the hazards and possible implications.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

☐ NYD ☒ No ☐ Yes If yes, briefly describe potential effects.

Are non-residential land use activities likely to be displaced as a result of the project?
☐ NYD ☒ No ☐ Yes If yes, briefly describe the likely effects.

The land can no longer be viably used for agriculture.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?
☐ NYD ☒ No ☐ Yes If yes, briefly describe the potential effects.

Is mitigation of potential social effects proposed?
☐ NYD ☒ No ☐ Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?
☐ No If no, list any organisations that it is proposed to consult.
☒ Yes If yes, list the organisations so far consulted.

Consultation with Aboriginal representatives occurred throughout the preparation of the Cultural Heritage Management Plan (CHMP 15323), prepared by Biosis. The organisations consulted include:

- Aboriginal Victoria
- Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC (the RAP))
- Wellington Shire Council

Refer to Section 4 of the CHMP.

What investigations of cultural heritage in the project area have been done?
(attach details of method and results of any surveys for the project & describe their accuracy)

A CHMP has been prepared to ensure the proposal protects and conserves Aboriginal cultural heritage. Given the cultural sensitivity of the area, a Desktop, Standard and Complex assessment was completed. These are summarised following.

Desktop Assessment

The Desktop Assessment identified two previously recorded places located on the foreshore of Lake Wellington. The assessment indicted that there is a high potential for unidentified cultural heritage material with the proposed area of works, most likely in the form of low density artefact distributions. As such, a standard assessment was required to assess the condition of existing places, the potential for the presence of unidentified Aboriginal cultural heritage within the area of works and the sensitivity of landforms to contain such material.

Standard Assessment
The Standard Assessment identified two further areas of archaeological potential in the form of sandy deposits. The first area was located within a patch of native vegetation between the Central Retreat building and the proposed staff accommodation and the second corresponding to a sandy ridge running parallel with Loch Sport Road.

Complex Assessment
The Complex Assessment included subsurface testing along the Lake foreshore, the sandy ridge and in areas where the highest impact activates are proposed. Surface material and low density subsurface scatters of cultural material were identified along the Lake Wellington foreshore. No cultural heritage material was recorded across other areas studied.

Refer to Section 5, 6 and 7 of the CHMP at Attachment I.

Is any Aboriginal cultural heritage known from the project area?

☒ NYD ☒ No ☒ Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

The Desktop Assessment found the following two previously recorded places located on the foreshore of Lake Wellington:

- VAHR 8321-0270 (now destroyed by the eroding foreshore)
- VAHR 8321-0279

During the Complex Assessment, three quartz fragments were recorded along the southern foreshore area, combined with additional surface material, these were registered as:

- VAHR 8321-0471

Refer to Section 8 of the CHMP at Attachment I.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

☒ NYD ☒ No ☒ Yes If yes, please list.

None identified.

Is mitigation of potential cultural heritage effects proposed?

☒ NYD ☒ No ☒ Yes If yes, please briefly describe.

The CHMP includes cultural heritage management conditions, as well as contingency plans. Amongst other things, the conditions imposed require a cultural heritage induction for all site workers/contractors, include measures to protect known heritage places, ensure identified areas for protection ('no-go' zones') are not impacted and detail measures to protect cultural heritage if found.

The contingency plans identify the process for dispute resolution and management measures for any unexpected cultural heritage found during activities related to the project.

Refer to Section 10 of the CHMP for management conditions and Section 11 of the CHMP for contingency plans at Attachment I.

Other information/comments? (eg. accuracy of information)

The CHMP has been approved by the RAP and on 24 July 2018, was lodged with Aboriginal Victoria (AV) for registration.

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

- ☒ Electricity network. If possible, estimate power requirement/output …….
- ☒ Natural gas network. If possible, estimate gas requirement/output ……...
- ☒ Generated on-site. If possible, estimate power capacity/output …….
- ☒ Other. Please describe.

Please add any relevant additional information.

The design incorporates Environmentally Sustainable Design (ESD) principles with the aim to achieve world leadership recognition through achieving the Green Star 6 Star benchmark.

The development will incorporate on-site renewable energy with an export of surplus green energy to the grid to be entirely self-sufficient. Following are the key components of the preferred energy model for the project:

- Roof mounted PV array (300-500kW)
- Battery storage (200KWH)
- 1.5km power cable and conduit (30kW)
- Biodiesel generators (2 x 100kW)

Refer to the Energy Stream Concept Design at Attachment K and the ESD Report at Attachment H.

What are the main forms of waste that would be generated by the project facility?

- ☒ Wastewater. Describe briefly.
- ☒ Solid chemical wastes. Describe briefly.
- ☒ Excavated material. Describe briefly.
- ☒ Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Wastewater will be pumped to the wastewater treatment system located within the Infrastructure Zone. Treatment will be performed using passive reedbed technology, with the entire process producing the equivalent of Class C water. Treated water will be provided to the adjacent farm (subject to appropriate agreements) for irrigation purposes.

Refer to Section 4.2 of the Integrated Water Cycle Management Strategy at Attachment G.

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

- ☒ Less than 50,000 tonnes of CO_2 equivalent per annum
- ☒ Between 50,000 and 100,000 tonnes of CO_2 equivalent per annum
- ☒ Between 100,000 and 200,000 tonnes of CO_2 equivalent per annum
- ☒ More than 200,000 tonnes of CO_2 equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

The project targets a Net Zero Energy baseline with a 100% reduction in greenhouse gases and an aspiration to meet the Passive House Standard.

Refer to the ESD Report at Attachment H.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

☒ No ☒ Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

☒ **Siting:** Please describe briefly

The development has been sited to:

- Minimise vegetation removal and avoid the removal of the most significant vegetation classes and all scattered trees.
- Avoid sensitive land forms and areas most likely to impact cultural heritage
- Avoid direct impacts to Lake Wellington and crown land along the foreshore, with a setback of 120 metres to the Lake edge.

☒ **Design:** Please describe briefly

The design of the development includes the following measures:

- Construction will use driven piles and the development will be elevated to avoid ground disturbance
- All buildings and key infrastructure elements are elevated above the flood level to minimise impacts to floodwaters, as well as ensuring safety during flooding events
- The built form is designed to minimise visual impacts through sensitive and innovative form and use of materials complementary to the landscape

☒ **Environmental management:** Please describe briefly.

An Environmental Management Plan (EMP) has been prepared that details the avoidance and mitigation measures that will be implemented throughout the life of the project. It includes measures to address potential impacts related to:

- Noise and dust
- Visual, amenity and access
- Flora, fauna and ecological communities
- Acid sulphate soils, erosion and hydrogeology
- Contamination Management
- Waste Management
- Water quality and soil erosion
- Cultural heritage

The EMP details management plans that will be prepared (if they haven't already) to ensure all environmental impacts are appropriately managed. These plans include:

- Construction Environmental Management Plan
- Water Quality and Soil Erosion Management Plan
- Recycled Water Management Plan
- Land Capability Analysis
- Acid Sulphate Management Plan (if required)
- Stormwater Management Plan
- Cultural Heritage Management Plan
- Traffic Management Plan
- Contaminated Land Management Plan
- Chemical and Fuel Storage Management Plan
- Waste Management Plan
- Emergency Response Plan

Refer to Section 7 of the Environmental Management Plan at Attachment F.

☐ Other: Please describe briefly

Add any relevant additional information.

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

☐ NYD ☒ No ☐ Yes If yes, briefly describe.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

☒ No ☐ Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

☒ No ☐ Yes If yes, briefly describe.

A further assessment of CASS during earthworks will be undertaken to ensure appropriate management of CASS if required.

Management plans will be prepared post-approval, as detailed in the EMP.

Consultation program

Has a consultation program conducted to date for the project?

☐ No ☒ Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

Public notification was undertaken pursuant to Section 52 of the *Planning and Environment Act 1987* in September 2018. This included:

- A public notice in the Gippsland Times Newspaper
- Display of a sign on the site fronting Longford-Loch Sport Road
- A letter to surrounding landowners

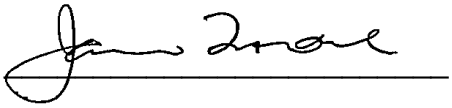
Has a program for future consultation been developed?

☐ NYD ☒ No ☐ Yes If yes, briefly describe.

Authorised person for proponent:

I, James Troedel,

CEO, Seacombe West Pty Ltd, confirm that the information contained in this form is, to my knowledge, true and not misleading.

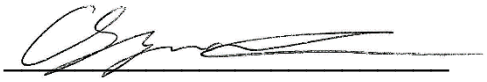
Signature 

Date: 06/12/2018

Person who prepared this referral:

I, Clare Szymczyk,

Senior Consultant, Urbis Ptd Ltd, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature 

Date: 06/12/2018