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 USB copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 10MB 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
PO Box 500
EAST MELBOURNE VIC 3002

Couriers

Minister for Planning
Level 16, 8 Nicholson Street
EAST MELBOURNE VIC 3002

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

Name of Proponent:	Department of Energy, Environment and Climate Action
Authorised person for proponent: **Position:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Scott Turner Director, Forest and Fire Operations, Barwon South West Cnr Of Little Malop St & Fenwick Street,Geelong,VIC,3220 Scott.turner@deeca.vic.gov.au 0427 400 790
Person who prepared Referral: **Position:** **Organisation:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Stewart Dekker Great Ocean Road Coastal Trail, Planning and Approvals Coordinator – Forest and Fire Planning | Barwon Southwest Department of Energy, Environment and Climate Action Cnr Of Little Malop St & Fenwick Street, Geelong, VIC, 3220 Stewart.j.dekker@deeca.vic.gov.au 0437 129 397
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	The Department of Energy, Environment and Climate Action (DEECA) has prepared this Environmental Effects Statement referral form and have utilised external and in-house expertise to undertake: • Community and Stakeholder engagement activities, • Phytophthora '*Cinnamon fungus*' considerations, and, • some elements of native fauna considerations (i.e, Swamp Antechinus, Broad toothed Rat and Otway Burrowing Crayfish). This project has been developed in consultation with project partners Parks Victoria, Eastern Maar Aboriginal Corporation, Great Ocean Road Coasts and Parks Authority. Firms engaged for input to this Referral include: World Trail Pty Ltd – Costs, Geotechnical Hazard Assessment, Coastal Hazard Vulnerability Assessment, Bligh Tanner Pty Ltd – Suspension Bridges, Structural Concept Design, Stormwater Management. Tract Pty Ltd – Landscape and Visual Assessment. Biosis Pty Ltd: • Desktop Ecological Values and Constraints Assessment • Cultural Heritage Values Desktop Assessment

	• Planning Desktop Assessment • Flora and Fauna Assessment (FFA) A.B. Heritage Consulting Pty Ltd – Cultural Heritage Management Plan (CHMP) Fairhaven to Grey River World Trail have been engaged by DEECA to assist with the design of the project.

2. Project – brief outline

Project title: Great Ocean Road Coastal Trail (GOR CT)

The project to date has used the title 'Great Ocean Road Coastal Trail' (GOR CT). This is just a working title. It is envisaged that when complete, the trail will have a name that reflects or references the Gadubanud culture and/or history of the area.

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 GOR CT is on Gadubanud Country, within Eastern Maar Nation, much of the trail replicates the regular trade routes and traditional walks of the Gadubanud people. The eastern end of the trail, in Fairhaven, is approximately 50mins from Geelong or 1hr 45 from Melbourne, by car. The trail follows the coastline from Fairhaven through the townships of Lorne, Wye and Kennett Rivers, finishing at Grey River.

The project extent is from the Great Ocean Road and Yarringa Road intersection in Fairhaven (GDA94 769130 5737750) to Grey River on the Great Ocean Road (GDA94 747000 5714550)

Refer to *Technical Report Alignment May 2024* in Appendix 1 for GOR CT location and alignment mapping.

Short project description (few sentences):

The GOR CT proposes a new approx. 75 km walking trail connecting coastal towns from Fairhaven to Grey River. Sections of new trail will connect with existing walking and management vehicle tracks to form a continuous walking trail network.

The trail will pass through the Great Ocean Road's landscape, showcasing iconic cliffs, lush forest environments, deep freshwater streams/rivers and popular seaside towns and villages. Lookouts and suspension bridges spanning wide valleys will provide iconic views of the Great Ocean Road coast.

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

The Great Ocean Road region is one of the world's most scenic and iconic coastal touring regions, and Victoria's premier tourism attraction outside Melbourne. It attracts more than 6 million people annually, almost double that of the Great Barrier Reef and Uluru combined, with visitation projected to increase to over 8.6 million by 2027.

Despite attracting strong visitation there is a trend for people to experience the Great Ocean Road region from their vehicle, with many driving through the small towns without stopping as they make their way to the Twelve Apostles. This visitor behaviour reduces the length of stay in the region to below the regional Victorian average, which impacts the benefits to the local visitor economy. This lack of spend in local towns prompted investigation around investment in products that will enhance the visitor offering and encourage visitors to stop, explore, and stay longer.

Feasibility Study
Early planning for the project started with the *Fairhaven to Skenes Creek Coastal Trail Feasibility Study* (refer to Appendix 2) undertaken by Ernst Young in 2019. The feasibility study identified a benefit-cost-ratio of 2.49, demonstrating that for every $1 invested in the trail, the Government could expect a return of $2.49. Noting, the *Fairhaven to Skenes Creek Coastal Trail Feasibility Study – Addendum* (refer to Appendix 3) subsequently increased the benefit-cost-ratio to $2.66.

Master Plan
In September 2022, the Minister for Environment and Climate Action launched the *Great Ocean Road Coastal Trail Masterplan* (the Masterplan), refer to Appendix 4.

The Masterplan outlined the project background, guiding principles, design approach and an alignment. In developing the Masterplan, a range of assessments, technical investigations, site visits, and stakeholder engagement sessions were undertaken. An iterative design process was employed, that saw multiple five official versions of the route explored and refined based on community feedback, research, and environmental assessments.

The Master Plan won the 2023 National Landscape Architecture award for excellence for Landscape Planning (link).

State Government has invested/committed $25.5 million to plan and construct the trail, with the Federal Government contributing $350,000 for planning through the Geelong City Deal.

3. Project description

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

The GOR CT proposes a new approx. 75km walk connecting coastal towns from Fairhaven to Grey River. Sections of new trail will connect with existing walking and/or management vehicle tracks to form a continuous walking trail network.

The GOR CT is proposed to leverage on the natural assets of the GORR and significantly enhance the visitor offering. By delivering a variety of experiences that cater to a broad range of visitors, the walk will increase the length of stay of existing visitors, attract new visitors to the region, and support year-round activation. It will incorporate many of the existing walking tracks in the region.

Guiding principles:

Walking on Gadubanud Country, Eastern Maar Nation

The ancient and dynamic landscapes of the Otway Coast are rich in Maar Story. The GOR CT will recognise and acknowledge past harms and assert the Eastern Maar's Relationship to Country, providing an opportunity for constructive reconciliation for the whole community.

Conserving and protecting the Otway Coast

The trail will pass through a Maar biocultural landscape filled with flora, fauna, geology and cultural and historic heritage. Through a careful and considerate landscape led design approach, the values of the landscape will be protected and environmental impacts will be minimised using best-practice protocols.

Encouraging All to be Active

Creating opportunities for people of all ages and abilities to be active and spend time in the natural environment promotes increased participation. The GOR CT will encourage people to stop, go for a walk and immerse themselves in the landscape.

Showcasing the Landscape

The GOR CT will provide opportunities for users to experience and immerse themselves in the landscape in a way not experienced by many people before.

Providing Economic Benefits

The GOR CT will provide an opportunity to improve the benefits, both direct and indirect, associated with tourism for local communities, the Otway region and the State.

Creating a Unique Visitor Experience

Walking along the rugged coastline and into the tall Otway forests, the GOR CT will provide a continuous walking trail experience that changes with the seasons and landscape.

Project area

All trail alignments and associated infrastructure have been buffered outwards by 2 km to make up the project area. Ecological values have been reviewed and described at a landscape scale for desktop assessment purposes.

Assessment corridor

A 20-metre-wide assessment corridor along all trails (i.e. 10m either side of the trail centreline) where biodiversity data has been collected (e.g. vegetation and tree mapping). The assessment corridor has provided data to inform realignments of the trail to avoid or minimise impacts to biodiversity.

Impact footprint

A 2.5-metre-wide corridor (1.25 metre either side of the trail centreline) along the entire trail alignment where vegetation removal and soil disturbance is likely to occur to construct trails.

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

The maximum length of trail proposed is 74.9km. Comprised of a mix of existing and new trails. However, funding has not yet been secured for the Cumberland- Winterbrook Bridge, consequently an approx. 2.2km walk around option (refer to Appendix 1, Map 5, Segment A2-3) is currently included in overall impact quantification and risk assessments. If funding is secured for the Cumberland- Winterbrook Bridge this section of trail will no longer be required or constructed.

Key project components include:

Trails:

- New walking trail – approx. 27.30km (36% of project length).
- New walking trail (existing informal tracks) – approx. 6.69km (9% of project length).
- New Boardwalk – approx. 0.05km (0.1% of project length).

TOTAL New trail 33.99km (45%)

- Existing walking trail – approx. 28.97km (39% of project length).
- Existing management vehicle track – approx. 8.06km (11% of project length).
- Beach/Rock Shelf – approx. 0.76km (1% of project length).
- Existing Road/Footpath – approx. 3.16km (4% of project length).

TOTAL Existing trail 40.95km (55%)

Approx. 11.6km (28%) of existing walking trail (incl. vehicle tracks, existing beach/rock shelf and existing road/footpath) is in a good condition that requires no works, other than installation of signage.

The proposed trail construction footprint consists of a 1.2m built trail surface and 0.6m buffer on both sides (1.2m total) to allow for benching, earthworks and/or drainage. This equates to a 2.4m wide construction footprint and vegetation removal area. A 2.5m wide construction corridor has been used to quantify environmental impacts.

The additional 1.2m wide construction buffer will not be required for most of the new sections of trail. Consequently, the actual total area of native vegetation removal associated with the project is expected to be significantly less than currently quantified.

This approach ensures that technical assessments provide a comprehensive analysis of potential impact and risk whilst providing the project with greater flexibility to further avoid and minimise impacts through detailed design and construction micro-siting.

Infrastructure

The GOR CT will be supported by a suite of infrastructure to enhance the experience for users and ensure the practicality and longevity of the trail. This infrastructure has been designed in accordance with the guiding principles of the project and generally consists of trailheads, signage and car parks.

Key elements include:

- minor upgrades of existing trailheads at Fairhaven/Moggs Creek.
- Minor upgrades of existing carparks at Allenvale, Jamieson Creek and Cumberland River.
- One new 5.5m x 2.75m carpark (8-12 vehicles) at Big Hill, no native vegetation removal required (refer to Appendix 28).
- One new hiker camp at Big Hill, approx. 0.3ha in area, some removal/distance of native vegetation expected for ground layers only (refer to Appendix 27).
- Three large suspension bridges (Reedy Creek 71m, Cumberland-Winterbrook 164m and Mount Defiance 165m).
- Five major lookouts (four new and one existing with no works required).
- Sixteen (16) minor lookouts (seven new, upgrades to 6 existing and 3 with no works required).
- Four (4) crossings of the Great Ocean Road (two (2) underpasses and two (2) road crossings)

Refer to Appendix 1 for relevant maps.

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

The majority of the GOR CT lies above the Great Ocean Road, limiting the need for road crossings.

There are five interactions with the Great Ocean Road (GOR). Regional Roads Victoria within the Department of Transport and Planning (DTP) has been (and continues to be) consulted with respect to qualified engineering, detailed design and construction requirements.

The identified road crossings require future detailed design based on site investigations and traffic/safety assessments. This will be undertaken by DTP pre-qualified design contractors in line with the relevant design standards including the *AustRoads Guide to Road Design and Traffic Management* and any relevant DTP/VicRoads supplements.

Trail and GOR interactions (incl. potential works)

Name/Location	Potential works for interaction point
Big Hill – Herschell Rd/GOR intersection	Provides access to the start/end of day 1/2 and for maintenance vehicles to Big Hill campground. Traffic treatment to be undertaken as advised by DTP/Design contractor.
Lily Ponds Reserve Culvert	Modify/construct existing culvert to allow for safe pedestrian access under bridge to beach when water levels are appropriate
Hall St Crossing	Create a suitable road crossing over GOR. Pedestrian island and signage likely treatments.
Hird St Crossing	Upgrade existing road crossing over GOR. Pedestrian island and signage likely treatments
Grey River Bridge	Modify/construct boardwalk under existing bridge to allow for safe pedestrian access to beach side of the GOR when water levels are appropriate.

Key construction activities:

The GOR CT has been designed to incorporate as much existing trail as possible, whilst also creating a walk that provides users with a high-quality walking experience, while minimising impacts to environmental and cultural values.

The existing trail networks include walking trails, management vehicle tracks and footpaths. There is one section of beach/rock shelf (761m) which has also been considered as 'existing trails', as it does not require any construction activities or works. Where unofficial or informal trails have been utilised, they have been considered 'new trails' for the purposes of impact quantification, planning/approvals, and construction considerations.

The trail has been designed to a Grade 3 standard under the *Australian Walking Track Grading System*. This requires a stable compacted all-weather surface. This grade is suitable for most ages and fitness levels; however, users may encounter natural hazards such as steep slopes, some unstable surfaces, many steps, and minor water crossings. This grade does not require any previous bushwalking experience and makes the trail accessible to a broad range of users.

Where existing trails are to be used, some upgrading may be required to achieve Grade 3 standards. Both new and upgraded (where needed) trails will generally be constructed to a standard width of 1.2m width. Wherever possible trail construction will utilise natural soil materials present on site, however in some instances imported material will be required to provide a suitable all-weather surface.

New trail types

Trail type	***Works***	***Quantity***
<u>Natural Trails:</u> Trails constructed using only site materials.	Existing site soil shaped and compacted into a trail suitable for all-weather pedestrian use.	Approx. two thirds of all new trail.
<u>Surfaced Trails:</u> Trails constructed using imported material compacted to create the trail surface.	Existing site soil is not suitable for formation of fit-for-purpose walking trail. e.g. where the material is too sandy, too wet, or too rocky.	Approx. one third of all new trail.

There are three (3) categories of trail upgrades (and associated works). Each option will be chosen based on site conditions.

Trail upgrades

Upgrade category	***Existing conditions***	***Trail surface works***
Minor	Existing route meets trail width requirements. Stable compacted all-weather trail surface, meeting the requirements of a Grade 3 standard under *Australian Walking Track Grading System* (or able to meet these requirements with minor grading/shaping). No significant erosion, scouring or water ponding/pooling.	Grading, shaping and compacting of existing trail surface material as required to meet requirements of the *Style Guide & Construction Manual.* No imported material.
Moderate	Existing route does not meet <u>one</u> of the following: • Defined trail width. • Free draining. • Stable, compacted, all-weather trail surface, meeting the requirements of a Grade 3 standard.	Works to address component not conforming, including: • Increasing trail width. • Drainage issues. • Construct stable, compacted, all-weather trail surface as either a 'natural' or 'surfaced' trail, depending on site condition.
Major	Existing route does not meet <u>two or more</u> of the following: • Defined trail width. • Free draining • Stable, compacted, all-weather trail surface, meeting the requirements of a Grade 3 standard.	To be identical to those for new trail construction.

GOR CT Style Guide & Construction Manual

A GOR CT *Style Guide & Construction Manual* (the Manual) (refer to Appendix 18) has been developed, specifying trail (and associated infrastructure) construction standards and requirements, particularly with respect to:

- Trail surfaces (new and upgrades)
- Steps
- Barriers/balustrades
- Minor lookouts
- Rockwork (armouring and retaining)
- Low level bridges & boardwalks
- Seats
- Foot wash stations

Key considerations include (but are not limited to):

a) Site protection
   - Silt/erosion
   - Vegetation

b) Setout
   - General
   - Trail drainage
   - Switchbacks
   - Set out hold points

- Installation
   - Programming of works
   - Trail alignment clearing
   - Subgrade for surfaced trails
   - Trail profile
   - Trail surface formation for natural trails
   - Trail surface formation for surfaced trails

c) Finishing
d) Maintenance

Typically, construction materials will be transported to site via existing maintenance/fire vehicle roads and/or utilising existing trails with small all-terrain vehicles (ATVs) and/or powered barrows. Aerial transportation via helicopter for larger infrastructure (i.e. prefabricated components for major bridges and lookouts) is also proposed, further minimising environmental impacts associated with transporting larger components and materials through heavily vegetated or inaccessible areas.

The four key 'types' of trail construction methodology consist of:

- Machine construction – typically used where there is ease of access and suitable topography for small width mini-excavators and machines, generally not more than 1.0-1.2m wide. Machines are used for trail cut, fill, compaction, and sub-surface preparation.
- Hand construction – generally used in remote areas inaccessible by machines and/or where the surface conditions (e.g. rocks, adjacent to water courses, etc.) and topography prevent machine access.
- Rock Armouring – is used to harden the trail surface, on steep gradients, where the soil would likely be displaced by water or trail users, leading to erosion, or crossing small streams or boggy sections. By hardening the base of the trail where it crosses the wet area, water can flow over the top of the rock armouring and users can still use the trail without becoming boggy or muddy.
- Elevated Structures – the construction of minor bridges/elevated structures to enable a trail to cross over a waterway or area of soft or boggy ground. The structures will vary in height above the ground, with heights typically less than 1 m above the ground other than the major crossing locations.

Signage

A signage and wayfinding package will be developed in consultation with EMAC and GORCAPA. Creating an identity for the walk that aligns with the project principles, traditional owner interests and the *GORCAPA Signage Strategy and Guidelines*. The package will include trailhead, interpretive and wayfinding signage and incorporate universal design principles. New technologies for digital wayfinding will also be explored throughout the design and development process.

Seating

Seating will be provided along the trail at intervals that respond to topography and/or viewpoints, although a maximum distance of approx. 5 km between seats/resting opportunities will be applied. The final form and finish will consider visitor expectations around a world class, landscape-based experience trail. Local and natural materials will be prioritised in conjunction with robustness and resilience (i.e. maintenance) factors considering the coastal and high rain fall environment.

Trailheads and carparks

Trailheads are an essential part of any trail. Trailheads are generally located at the start and finish of each segment, with the design of each trailhead determined by the required level of service at each location.

Car parking is known issue along the Great Ocean Road, particularly during peak periods. Most visitors travel by car with the drive along the Great Ocean Road being a major drawcard. Car parking for the GOR CT will need to service both multiday walkers at the start of the trail, and day visitors doing sections of the trail.

All but one trailhead is proposed at an existing car park. Each location has potential for limited expansion (i.e. between 5 – 15 additional spaces), except for the Cumberland River car park. A new small carpark is proposed (at 5.5m x 27.5m) in the vicinity of the proposed new Big Hill campground, no native vegetation removal will be required (refer to Appendix 28) as it is in a cleared area under a powerline easement. The table below provides a summary of trailhead options and potential scope of works.

Location	Existing/ New	Current car parks	Potential increase	Existing water	Proposed works
Fairhaven - Yarringa Road	Existing /Informal	50	None	No	Signage only
Moggs Creek	Existing	15	5 to 10	Yes	Signage and + 5 – 10 car parks

Big Hill	New	0	10 to 15	No	Signage and new car park
Allenvale	Existing	8	5 to 10	No	Signage and + 5 – 10 car parks
Sheoak	Existing	30	5 to 15	No	Signage only
Cumberland	Existing	30	None	Yes	Signage only
Jamieson Creek	Existing	10	5 to 10	No	Signage only
Kennett River	Existing	25	5 to 10	Yes	Signage only
Grey River	Existing	10	None	No	Signage only

Note that the proposed works above are indicative only and design work and any required additional assessments for each will be undertaken in late 2024 in consultation with Parks Victoria, EMAC and GORCAPA.

Shuttle Services:
Through-walkers will be provided with transport connections services at the start and end of the walk. Additionally, shuttle services may be provided between trailheads for day visitors. Trail head car parks will be designed to accommodate shuttle buses and promoting the use of shuttle services will likely reduce the demand for car parks along the trail route.

Accommodation:
Many accommodation options exist along the GOR CT. The trail has been deliberately designed to minimise the need for new accommodation options. In addition to township (i.e. motels and Air BnB) numerous camping options exist for multi-day walkers, including:

- Lorne Foreshore Caravan Park - managed by GORCAPA.
- Cumberland River Holiday Park - private management.
- Jamieson Creek Bush Campground - managed by Parks Victoria.
- Kennett River Family Caravan Park - managed by GORCAPA.

New campground:
A new campground is proposed at Big Hill (end of Day 1) as there are no alternative accommodation options between Fairhaven and Lorne. Detailed design of the Big Hill hiker camp is still underway; however, it will include:

- 8-12 camping pads/platforms suitable for 2 small hiking tents each, with multiple tie-down options to suit different tent types and shapes (e.g. tensioning chains, tie-down hooks).
- Designated seating or cooking stove areas to limit impacts to surrounding vegetation.
- Toilets.
- Water.
- Optional additional features such as bag hooks, drying rack, USB charging points for small electronics (GPS watches, phones, GoPro's, cameras).
- Connecting boardwalks or paths between tent platforms and campsite amenities, group shelters etc. which discourage foot traffic on surrounding vegetation, complemented by basic way-finding signage.
- A conservative upper estimate of 0.3ha of native vegetation removal has been quantified/assessed within the Flora and Fauna Assessment to accommodate the campground; however, this will be ground layer only and not required in all instances as shown in Appendix 27.

Suspension Bridges:
Three suspension bridges are proposed; however, funding has only been secured for two, consequently a walk around is also proposed at the Cumberland-Winterbrook suspension bridge site (refer to Appendix 1, Map 5, Segment A2-3). If funding is secured for the Cumberland-Winterbrook Bridge this section of trail will no longer be required or constructed.

Suspension bridges are one of the most cost-effective and environmentally sensitive ways to create a long-span bridge to cross a large area without intermediate supports.

The projects Geotechnical Hazard and Risk Assessments (refer to Appendices 10 and 12) have guided the preparation of the *Great Ocean Road Coastal Trail Suspension Bridge* (refer to Appendix 11) structural concept design report which outlines the final siting locations, span, height, and bridge abutment recommendations for each bridge site.

Initially six potential bridge sites were considered; however, only three (3) have been selected for final project scoping, these are:

Bridge	**Span**	**Height above Valley floor (approx.)**
Reedy Creek (Segment 2)	71m	20m
Cumberland – Winterbrook (Segment 4)	164m	75m
Mount Defiance (Segment 4)	165m	45m

All bridge locations are underlain by sandstone/siltstone rock with overlying soils suitable for shallow or deep foundations and anchors. Where rock can be encountered at reasonable depths, tower foundations will be founded on top of this rock and back stay foundations will be anchored into the rock.

Limitations on construction access and construction equipment will greatly influence design options and costs. The remote aspects of bridge locations mean it will not be possible to get a crane or trucks to the sites. Everything will need to be erected with light weight equipment or be flown in by helicopter. Prefabrication will be maximised.

Detailed design for suspension bridges is still underway; however, all will be designed and built to AS 2156.2-2001 Walking tracks - Infrastructure *design*.

Lookouts

The GOR region is known for its dramatic views of the Otway Ranges descending into Bass Straight. In support of the proposed world-class walking trail a series of lookouts are proposed to improve the nature-based experience and assist in attracting visitors to the region in line with the guiding principles of the project.

The lookouts will be developed using a landscape led design approach that ensures a sympathetic integration with the natural environment.

Lookouts will cater for locals, day walkers and multi-day hikers depending on the proposed location, the ease of accessibility and the anticipated visitors. In locations where high numbers of visitors are anticipated, the lookouts will be designed and engineered for higher capacity. Where the lookout is proposed on a remote part of the trail, only accessible by foot, only modest interventions are proposed.

There are two types of lookouts proposed, major and minor.

Major Lookouts:

- Iconic and dramatic landscape location.
- Will add to the walking experience.
- Moderate proximity to a town and/or other key walk attractions, likely access by day walkers.

Minor Lookouts:

- Located away from major town or other key trail attractions.
- Walking access only and unlikely to be a drawcard for day walkers.
- Natural rest stop for walkers.
- Moderate level of service requirements.
- Moderately dramatic landscape location.

Full list of lookouts proposed.

Name	**Category**	**Existing /new**	**Works proposed**
Jamieson Creek	Major	Existing	None

Kelsall's Rock	Major	New	Detailed design to be completed. Maximum size 25m^2. No overhang/cantilever. Low level decking with balustrade
Langdale Pike	Major	New	Detailed design to be completed. Maximum size 25m^2. Raised structure with decking and balustrade
Mt Defiance Lookout	Major	New	Detailed design to be completed. Maximum size 25m^2. Raised structure with decking and balustrade
Mt Meuron	Major	New	Concept design to be completed. Maximum size 25m^2. Raised structure with decking and balustrade
Cathedral Rock	Minor	New	Detailed design to be completed. Maximum size 10m^2.Small raised structure with decking and balustrade
Coalmine Creek	Minor	New	1 or 2 seats
Golf Links (#1)	Minor	New	2 seats
Winterbrook Creek (#3)	Minor	New	Maximum size 10m^2.Small raised structure with decking and balustrade
Cumberland River (#4)	Minor	New	Maximum size 7m^2. 2 seats and balustrade
Point Hawdon lower (#8)	Minor	New	2 seats
Point Hawdon upper (#9)	Minor	New	2 seats
Castle Rock	Major	Existing	Detailed design to be completed. Maximum size 20m^2. Upgrade of existing structure to include decking and balustrade
Ocean View	Minor	Existing	Maintenance of existing structure
Paddy's Path	Minor	Existing	None
Sheoak/Swallow Cave	Minor	Existing	None
Tramway Track	Minor	Existing	None
Tramway Track #2	Minor	Existing	Minor Upgrade
Godfrey Track (#5)	Minor	Existing	None
Separation Creek (#6)	Minor	Existing	None
Kennett River North (#7)	Minor	Existing	Minor Upgrade

Detailed design for four (4) new major lookouts and one (1) minor lookout (Cathedral Rock) is currently in procurement phase. One (1) major lookout (being Mt Meuron) is currently unfunded, consequently it will only have a concept design until funding is secured.

Key operational activities:

Planning and construction of the walking trail is being delivered by DEECA on behalf of project partners Great Ocean Road Coast and Parks Authority (GORCAPA), Parks Victoria (PV) and Eastern Marr Aboriginal Corporation (EMAC). Once construction activities are completed the ongoing management, maintenance and operation of the trail will be the responsibility of GORCAPA.

GORCAPA will develop an Operational Management Plan to provide a framework for the ongoing management of the trail. This will include maintenance, revegetation (where required), weed/pest hygiene management and monitoring and mitigation of potential impacts such as litter, traffic management etc.

A specific Emergency Management Plan will also be developed with all relevant Emergency Services, that will outline the hazards, risks and mitigation actions that will occur.

Key decommissioning activities (if applicable):

Minor areas that are disturbed for the construction of the project, but not required for its operation, will be rehabilitated and allowed to naturally regenerate.

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

☒ No

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

☒ No

Noting a section of unfeasible trail between Grey River and Skenes Creek which is outlined in more detail within Section. 5 – Proposed Exclusions.

What is the estimated capital expenditure for development of the project?

Construction type	**2024/25**	**2025/26**	**Total**
Construction (upgrade existing tracks)	$650,000	$507,000	$1,157,000
Construction (new tracks and furniture)	$2,500,000	$5,071,000	$7,571,000
Construction (lookouts)	$500,000	$685,000	$1,185,000
Construction (bridges)	$1,000,000	$2,280,000	$3,280,000
Construction (campground, carparks, trailheads)	$400,000	$600,000	$1,000,000
Construction total	***$5,050,000***	***$9,143,000***	***$14,193,000***

4. Project alternatives

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

GOR CT background involving alignment alternatives.
2015

Following the Christmas Day bushfires, the Wye River, Separation Creek and Kennett River community advocated for a walkable trail to improve linkages between communities by connecting the Surf Coast and Great Ocean Walks.

2018
The Victorian Government announced $300,000 funding to investigate the feasibility of a walking trail from Apollo Bay to Torquay as part of its strategic plan to improve connectivity and boost economic activity along the Great Ocean Road.

The Commonwealth Government also committed $350,000 to undertake detailed planning, engineering, and geotechnical investigations necessary to further develop the proposal. The study area for the project was amended to Fairhaven to Skenes Creek, as there was already a trail between Torquay and Fairhaven (Surf Coast Walk), and the Apollo Bay to Skenes Creek Discovery Trail had received funding through the Geelong City Deal.

2019
The *Fairhaven to Skenes Creek Coastal Trail Feasibility Study* (refer to Appendix 2) was developed. The study explored various trail alignments and concepts to determine potential viability through assessment of anticipated costs, impacts and benefits. The Feasibility Study proposed a concept route alignment broken up into four main sections. It also made two key recommendations, these being:

- due to significant challenges presented by the fourth section (from Grey River to Skenes Creek), further investigation would be required to identify a viable option,
- a '*Trails Master Plan*' be developed.

2020
Further investigation of the problematic fourth section between Grey River and Skenes Creek was undertaken, particularly around Cape Patton. The investigation found that a coastal route around Cape Patton was not feasible. Consequently, several 'significantly inland' route options were identified. The Victorian Government committed $25.23 million (based on Feasibility Study cost estimates) to deliver the GOR CT project.

2022
The GOR CT Master Plan (refer to Appendix 4) was developed and exhibited for public comment. The Master Plan investigated and considered multiple trail alignments (five), smaller loop-walks, and 'walk-around' options in case major bridges could not be constructed. Alignment options were developed in response to detailed environmental, cultural heritage and geotechnical assessments, resulting in numerous re-routings in sensitive areas to avoid and minimise potential negative impacts.

2023
A formal review of the project scope was undertaken to ensure constructability within available funding. A *Minimum Viable Product* (MVP) (refer to Appendix 19) report was developed outlining a range of measures and/or alternatives ensuring the GOR CT aligned with overarching objectives whilst minimising environmental, visual and affordability impacts. Key recommendations of the scope review included:

- downgrading two 'Premier' lookouts to 'Major' (adopted).
- Downgrading several 'Major' lookouts to 'Minor' (adopted).
- Removal of Grey River to Skenes Creek (adopted).
- Modest changes to the trail alignment (adopted).
- Removal of several proposed loop walks (adopted).

Summary of trails removed/realigned since concept/initial design.

Trai Number	Trail design version	Comments/rational
4 22_Alt 29_Alt	Concept Alignment 1	Removal of trails aligned along beach from the network to avoid impacts on breeding habitat for Hooded Plover.
1_Alt 3	Concept Alignment 2	Removal of trails from network to avoid areas of high quality EVC 48 – Heathy Woodland and EVC 6 – Sand Heatland. Trails have been realigned to

		GTR2 to use existing walking trails and management vehicle tracks.
16_Alt, 20_Alt 21_Alt, 22_Alt 23_Alt, 24_Alt	Concept Alignment 2	These trails have been removed from the network as a result of advice from DELWP, to avoid potential impacts on Southern Bent-wing Bat non breeding and roosting caves.
2, 3, 4 5, 6	Ground-truthed Route 1	Removal of trails from network to avoid areas of high quality EVC 48 – Heathy Woodland. Section was re-aligned to use exiting trail to the north.
14, 15 19, 41	Ground-truthed Route 2	Realignments based on recommendations from the Phytophthora Dieback Management Report.
5_Opt, 7_Opt, 8_Opt, 9_Opt 10_Opt, 11_Opt, 12_Opt	Ground-truthed Route 2	Removal of 7 optional alignments/loop walks to reduce project scope/impacts
78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89	Ground-truthed Route 2	Trails removed from Grey River to Skenes Creek

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

None

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:

A long-term vision for the GOR CT was to link the Surf Coast Walk (Fairhaven) with the Great Ocean Walk (Apollo Bay). In response to several challenges identified within the Feasibility Study 2019, Master Plan and Minimum Viable Product report, a viable route between Grey River and Skenes Creek has not been identified. Key challenges included geotechnical risk, interactions with the Great Ocean Road, lack of Crown land and potential interactions with freehold land, legislative approvals under the *Marine and Coastal* Act 2018 and costs associated with potential lengthy re-routing. Consequently, the sections of trail between Grey River and Skenes Creek have been excluded from this project.

The GOR CT project team is aware of similar project led by the Colac Otway Shire Council which considered developing a walking trail from Apollo Bay (from Wild Dog Creek) to Skenes Creek which was abandoned in 2023 due to difficulties associated with cost, constructability, and legislative approvals (i.e. *Marine and Coastal* Act 2018).

6. Project implementation

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

DEECA is delivering the project on behalf of Parks Victoria. This land is to be transferred to GORCAPA by 31 December 2025.

Implementation timeframe:

Subject to planning and approvals the current implementation timeframe is to commence construction in 2025 and be operational by June 2026.

Proposed staging (if applicable):

The GOR CT project is not an element or stage in a larger project. However, funding has not been secured for all elements of the current proposal package (e.g. some suspension bridges are not funded, meaning walk around options are also proposed in these locations).

Trail (and associated infrastructure) construction may not occur in a 'start to finish' continuous sequence, it may be undertaken in stages and/or occur at numerous locations at once, particularly with respect to upgrading existing trail sections and construction of new trail sections. It is currently anticipated that by June 2026 hikers will be able to walk from end to end.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

☒ Yes If yes, please describe the preferred site in the next items (if practicable).

Refer to Appendix 1 for relevant mapping.

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):

Geology/topography/landform

Fairhaven to Eastern View

Underlain by Cenozoic sedimentary geology. Landforms are comprised of a mix of gently sloping terrain and some steeper slopes with a relief range of approximately 70m. The trail commences in Fairhaven on a low dune between the Great Ocean Road and beach, then traverses a series of southeast trending V-shaped valleys between Fairhaven and Eastern View.

Eastern View to Lorne

Underlain by the Eumeralla Formation comprised of sandstone and mudstone. Landforms are comprised of a mix of gently sloping terrain and some steeper slopes with relief range of about 100m. There are a series of low elevation areas near the coast at Grassy Creek, Spout Creek, Stony Creek, Reedy Creek and Erskine River with narrow floodplains underlain by alluvium. The coast is formed mostly from rocky shore platforms with occasional sandy interludes forming beaches.

Lorne to Grey River

Underlain by the Eumeralla Formation comprised of sandstone and mudstone with clay inter beds. Landforms are comprised of steep slopes towards the coast with a relief range of more than 100 m. There are several low elevation streams which meet the coast, they typically flow out of steep V-shaped gullies, with narrow strips of associated alluvium in places. The water course crossings include Saint George River, Cumberland River, Jamieson Creek, Separation Creek, Wye River, Kennett River and Grey River.

Drainage/waterways

The GOR CT falls within the Corangamite Catchment Management Authority (Thompsons and Otway Coast sub-catchment area) and crosses the following waterways, as well as numerous ephemeral and lower-order streams:

- Moggs Creek – Existing crossing

- Erskine River – Existing crossing
- St Georges River – New 13m low level bridge alongside Allenvale Road
- Cumberland River – Two upgraded stepping stone crossings
- Jamieson Creek – New 10m low level bridge
- Wye River – Existing crossing
- Kennett River – Existing crossing
- Grey River – New 8m low level bridge

Native/exotic vegetation cover
Most vegetation cover throughout the project area is continuous native vegetation forming part of the Great Otway National Park, broken up around settlements along the coastline.

The project area is located within two distinct bioregions, the Otway Plain and the Otway Ranges.

The Otway Plain bioregion occurs at the north-east end of the project area around Fairhaven. This bioregion is characterised by sloping coastal plains occurring from the coastline to 200 metres in elevation. Vegetation consists largely of coastal heathlands that are dominated by Tea-tree *Leptospermum* spp. The community grades into woodland dominated by Swamp Gum *Eucalyptus ovata*, Brown Stringybark *E. baxteri* or *Messmate E. obliqua*, all with a heath-dominated understorey. Dry sclerophyll forests are also present, co-dominated by Swamp Gum and Brown Stringybark.

The Otway Ranges bioregion makes up most of the project area. The landscape is characterised by steep topography on the southern coastal fall of the ranges, although terrain immediately adjacent to the coast can be gentler slopes.

Vegetation is comprised of forests and woodlands. Cool Temperate Rainforest is widespread and is usually co-dominated by Myrtle Beech and Blackwood Acacia melanoxylon. However, Wet sclerophyll forest is the dominant vegetation type within the project area and is comprised of a tall canopy (exceeding 40 metres high). A variety of Eucalyptus species dominate this community, often driven by moisture levels.

Road frontages
The majority of the GOR CT lies above the Great Ocean Road, limiting the need for road crossings. Where the trail uses existing walking trails through Lorne, there are two road crossings that may need to be improved to reduce risk and improve the visitor experience.

Ground-level photographs of site
At-ground photographs of the trail network and environs can be found within the GOR CT Master Plan (Appendix 4) and the Landscape and Visual Impact Assessment (Appendix 15).

Site area (if known): . **(total of below)**

Route length (for linear infrastructure) 75 km **and width** 2.5 m

Approx. 41km of existing trail/forest track network and 34km of new trail.

Current land use and development:

Most of the project area is either:

- undeveloped with intact native vegetation.
- Existing trail/forest track network currently used for passive recreation.

Ninety-two percent (92%) of the GOR CT lies within the Great Otway National Park managed by Parks Victoria. However, the trail also passes through multiple coastal reserves predominantly managed by GORCAPA, including:

- Apollo Bay Coastal Reserve
- Cumberland River Coastal Camping Reserve
- Kennett River Coastal Reserve
- Lily Pond Bushland Reserve
- Wye River Water Frontage
- Lorne - Queenscliff Coastal Reserve
- Elliot River - Addis Bay Coastal Reserve (managed by Parks Victoria)
- Lorne Coastal Reserve
- Wye River Coastal Reserve

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

The trail starts at the township of Fairhaven, by-passes the small coastal community of Moggs Creek approx. 1km to the north (in response to community feedback), traverses the townships of Lorne, Wye River and Kennett River and ends at Grey River. The township of Lorne is the largest community that the trail alignment passes through, containing petrol stations, cafés, restaurants, hotel, motels, a post office, a visitor centre, schools, a supermarket, general store and a bowls club.

Most of the GOR CT lies within the Great Otway National Park, managed by Parks Victoria to (amongst other objectives):

- provide opportunities for informal recreation associated with the enjoyment of natural surroundings.
- Protect and conserve biodiversity, natural and cultural features, and water supply catchments.

The Great Otway National Park provides for numerous recreation activities, including (but not limited to) recreational fishing, surfing, vehicle touring, mountain bike riding, horse riding, an extensive network of walking tracks including walk-in-only camp sites, 4x4 driving, hang gliding and dog walking.

The broader Great Ocean Road region is home to regionally, nationally and internationally recognised tourist attractions, providing the GOR CT with existing access to:

- high quality pedestrian and vehicular transport networks,
- extensive accommodation options, including campgrounds, caravan parks, hotel/motels, and Air BnB's, and
- public open spaces and recreational infrastructure that includes beaches, clifftop lookouts, picnic areas, historic sites and waterfalls.

The trail itself can be broadly grouped into either:

- new sections that contain intact native vegetation, or
- existing trails, roads, footpaths and/or boardwalks.

The GOR CT traverses a number of existing picnic areas, campgrounds and caravan parks, each offering a variety of facilities/services, including:

<u>Picnic areas/campgrounds</u>

- Moggs Creek Picnic Ground: public open spaces, toilets, carparking, picnic tables, fire pits and visitor display/signage.
- Lily Pond Bushland Reserve: public open spaces, carparking, bench seating.
- Tramway/Teddys Lookout: under cover rotunda, car parking, picnic tables, bench seating and visitor display/signage.
- Lorne Foreshore: public open spaces, toilet blocks, picnic tables, picnic tables, bench seating, children's playground, visitor display/signage and extensive car parking.
- Allenvale Mill Bush Campground: 20 walk-in campsites, non-flush toilets, low picnic tables and fire pits.
- Sheoak Picnic Area – public open space, car parking, under cover picnic tables, toilets, gas barbecues, picnic tables, visitor display/signage and bench seating.
- Jamiesons Creek Bush Campground: 24 campsites, car parking, non-flush toilets, shared fireplaces and bench seating.

<u>Caravan Parks</u>

- Lorne Foreshore Caravan Park: cabins, powered and un-powered sites.
- Queens Park Campground: powered and un-powered sites for tents, camper trailers and small camper vans only. No caravans.
- Cumberland River Holiday Park: cabins, powered and un-powered sites.
- Wye River Beachfront Campground: powered and un-powered sites.
- Wye River Holiday Park: cabins, powered and un-powered sites.
- Kennett River Family Caravan Park: cabins, powered and un-powered sites.

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

***Great Otway National Park and Otway Forest Park Management Plan*, December 2009**

The GOR CT project has considered the *Great Otway National Park and Otway Forest Park Management Plan*, December 2009. Key elements include:

- *Identification of current and future challenges for the sustainable management of the parks, in protection and enhancement of natural and cultural values, provision and promotion of tourism and recreation experiences, and resource utilisation.*

- *Provision and promotion of tourism and recreation activities in the parks, for a diverse, inspirational and sustainable range of nature-based tourism and recreational experiences.*
- *Support for a sustainable nature-based tourism and recreation industry that provides economic and social benefits to Otways communities.*

The GOR CT proposal does not conflict with the Plan and in many ways supports '*nature-based tourism and recreation industry that provides economic and social benefits to Otways communities'.*

Victorian Planning Provisions (VPP's)
The project has been defined as '*Informal outdoor recreation*' under Clause 73.03 of the VPP's (Land Use Term). This is defined as '*Land open to the public and used by non-paying persons for leisure or recreation, such as a cycle track, picnic or barbecue area, playground, and walking or jogging track*' and is also included within Clause 73.03 as a '*Minor sports and recreation facility*'.

The project area is located within the Surf Coast and Colac-Otway Shire Councils and is subject to the planning controls outlined in the Surf Coast and Colac-Otway Planning Schemes.

Detailed VPP's assessment can be found in the Planning Desktop Assessment (refer to Appendix 9).

Surf Coast Shire
Between approx. Fairhaven and Cumberland River, the project area occurs on land within the Surf Coast Planning Scheme to which the following provisions apply:

- General Residential Zone – Schedule 1 (GRZ1)
- Rural Conservation Zone (RCZ)
- Public Park and Recreation Zone (PPRZ)
- Public Conservation and Resource Zone (PCRZ)
- Transport Zone 2 (TRZ2)

And,

- Environmental Significance Overlay (ESO) – Schedules 1, 4 and 5.
- Significant Landscape Overlay (SLO) – Schedules 1 and 4.
- Heritage Overlay (HO) – Reference no. 53, 58 59, 67, 68, 71, 78 and 163.
- Design and Development Overlay (DDO) – Schedules 10 (DDO10) and 12 (DDO12).
- Neighbourhood Character Overlay (NCO) – Schedule 1.
- Land Subject to Inundation Overlay (LSIO).
- Bushfire Management Overlay (BMO) and Schedule 2 (BMO2).

The following permit requirements under the Surf Coast Planning Scheme are likely to apply:

- Clause 36.04, Transport Zone (TRZ2): a permit is likely to be required for land use under the TRZ2.
- Clause 42.01, Environmental Significance Overlay (ESO): a permit is likely to be required for buildings and works, to construct a fence, and to remove, destroy or lop any vegetation including dead vegetation under the ESO.
- Clause 42.03, Significant Landscape Overlay (SLO): a permit is likely to be required to construct a fence and to remove, destroy or lop and vegetation under the SLO.
- Clause 44.04, Land Subject to Inundation Overlay (LSIO): a permit is likely to be required for buildings and works under the LSIO.
- Clause 52.29, Land adjacent to the Principal Road Network: a permit is likely to be required to create or alter access to a road in a TRZ2.
- Clause 44.06, Bushfire Management Overlay: a permit is required to carry out works associated with the use of a site for 'Leisure and Recreation.'

Colac-Otway Shire
Between approx. Cumberland River and Grey River the project area occurs on land within the Colac Otway Planning to which the following provisions apply:

- Township Zone (TZ)
- Rural Conservation Zone (RCZ)
- Public Conservation and Resource Zone (PCRZ)
- Transport Zone 2 (TRZ2)
- Public Use Zone – Schedule 7 (PUZ7)

And,

- SLO – Schedules 2 and 3
- HO - Reference no. HO210, HO243, HO244, HO312
- ESO – Schedules 2 and 4
- DDO4

- NCO1
- BMO

The following permit requirements under the Colac-Otway Planning Scheme are likely to apply:

- Clause 36.04, TRZ2: a permit is likely to be required for land use under the TRZ2.
- Clause 42.01, ESO: a– A permit is likely to be required for buildings and works, to construct a fence, and to remove, destroy or lop any vegetation including dead vegetation under the ESO.
- Clause 42.03, SLO: a permit is likely to be required to construct a fence and to remove, destroy or lop and vegetation under the SLO.
- Clause 44.01, Erosion Management Overlay (EMO): a permit is likely to be required to remove, destroy or lop any vegetation, if the removal of roots below ground level is required on land mapped under the EMO1.
- Clause 44.04, LSIO: a permit is likely to be required for buildings and works under the LSIO.
- Clause 52.29, Land adjacent to the Principal Road Network: a permit is likely to be required to create or alter access to a road in a TRZ2.

The following exemptions may apply to the project under both the Surf Coast and Colac Otway Planning Schemes:

- Clause 52.05, Signs: a permit is not likely to be required for signage associated with the GORCT if the trail's relevant signage meets the definition of a '*Direction sign*' (See Section 5.1.1 of this report).
- Clause 52.17, Native Vegetation: a permit to remove, destroy or lop native vegetation, including dead native vegetation is required, unless an exemption under Clause 52.17-7 applies. Application of the '*Crown land*' exemption under Clause 52.17-7, whereby a permit is not required under Clause 52.17 for native vegetation which is removed on Crown land '*by or on behalf of*' DEECA, Parks Victoria and the Great Ocean Road Coast and Parks Authority.
- Clause 62.02-2 provides an exemption for '*repairs and maintenance to an existing building or works*' which is likely to apply to upgrading works which will occur along existing sections of the GOR CT.
- Clause 73.03: Land use associated with the GOR CT is likely defined as '*informal outdoor recreation*', which is exempt from permit requirements under a number of zones and overlays in the Surf Coast and Colac Otway Planning Schemes.

Clause 52.30 - State projects:
GOR CT has potential to be considered under *Clause 52.30 – State Projects*, satisfying several decision criteria, including:

- *carried out by or on behalf of, or jointly or in partnership with, the State of Victoria or a public authority; or*
- *funded, or partly funded by, the State of Victoria or a public authority;*
- *or carried out on Crown land*.

However, under *Clause 52.30 – State Projects* this pathway is only possible if a 'no' Environment Effects Statement decision was made under the *Environment Effects* Act 1978.

The GOR CT project team has discussed the potential of *Clause 52.30 – State Projects* with the Department of Transport and Planning (Planning Concierge team) and although early in scoping assessment/approvals pathways, this pathway is currently the GOR CT project teams preferred planning approval pathway.

Local government area(s):

Surf Coast and Colac Otway Shire Council's.

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):

Historic Cultural Heritage
A total of 17 registered historic heritage places/sites were located within the initial study area, including places and sites on the National Trust Register, Heritage Overlay, Victorian Heritage Inventory, Victorian Heritage Register and National Heritage List. While a total of seven historic heritage places and sites are directly adjacent to the study area.

Six of the registered historic heritage places/sites are located within the proposed construction corridor (i.e. sections of new trails). The additional eleven places are located within sections of existing trails and will not be impacted by any construction works for new trail sections and are also unlikely to be impacted by any maintenance/upgrade works.

The Great Ocean Road represents five of the six historic registered places/sites that are located within the proposed construction corridor. The remaining place/site is known as the Dugout and no longer located within the proposed construction corridor, due to the removal of all trail sections between Grey River and Skenes Creek.

The majority of registered historical places/sites within and adjacent to the study area are located in Lorne and predominantly relate to the general settlement of the region, sawmills and logging, and to the construction of the Great Ocean Road and the repatriation of ex-servicemen.

Aboriginal Cultural Heritage
Based on desk-top analysis, seventy-two Aboriginal places comprising eighty-three components are registered within the geographic region. A total of fifty-six registered Aboriginal places consisting of sixty-four individual place components have been registered within 50m of the proposed trail alignment (and associated project infrastructure).

The Aboriginal places identified within the study area are primarily comprised of Shell Middens, followed by Artefact Scatters, Object Collections, Low Density Artefact Distributions, Earth Features (Soil Deposits) and Aboriginal Ancestral Remains (Burial). It is likely that shell middens predominate due to the proximity of the coastline and associated coastal watercourses to the study area.

Aboriginal places have been identified primarily on or in direct association to rise landforms such as hills, dunes and ridges. Additionally, Aboriginal places have been identified on landforms located in close proximity to creeks and rivers, such as floodplains, levees and inlets. Ancestral Remains (Burials) do occur within the geographic region and its surrounds. Given the prevalence of dunes within the study area it is possible that additional Aboriginal Ancestral Remains (Burials) may be identified.

Areas of high sensitivity include southern periphery of the Otway Range (high densities located on coastal plains and crests of hills and ridges), northern periphery (low densities, located along crests of hills and ridges) and interior of the Otway Range (low densities, located along the tops of ridges).

Flora and Fauna Assessment (FFA)
Two Flora and Flora Assessments have been undertaken for the project to date. The first being the *Great Ocean Road Coastal Trail Flora and Fauna Assessment*, Dec 2022 (Appendix 16), which considered the trail alignment during the Master Plan phase of the project. This assessment recommended several impact avoidance strategies and mitigation recommendations, all of which have been adopted, some of which resulted in trail alignment modifications. The second assessment, being the *Great Ocean Road Coastal Trail Flora and Fauna Assessment*, June 2024 considers the ecological values of the final trail alignment (and location of associated infrastructure).

<u>Native vegetation</u>
The site is located within the Otway Plain and Otway Ranges bioregions.

The Otway Plain Bioregion includes:

- EVC 21 – Shrubby Dry Forest, with a Bioregional Conservation Status (BCS) of least concern.
- EVC 48 – Heathy Woodland, BCS of least concern.

The Otway Ranges Bioregion includes:

- EVC 16 – Lowland Forest, BCS of depleted.
- EVC 18 – Riparian Forest, BCS of least concern.
- EVC 21 – Shrubby Dry Forest, BCS of least concern.
- EVC 22 – Grassy Dry Forest, BCS of depleted.
- EVC 45 – Shrubby Foothill Forest, BCS of least concern.
- EVC 48 – Heathy Woodland, BCS of least concern.
- EVC 161 – Coastal Headland Scrub, BCS of depleted.
- EVC 201 – Shrubby Wet Forest, BCS of least concern.

<u>Threatened species and communities</u>
Twenty-two EPBC Act listed flora species and 81 EPBC Act listed fauna species have been recorded or predicted to occur in the project search area.

Potential areas of five (5) *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC) listed threatened ecological communities, including:

- Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria.
- Giant Kelp Marine Forests of South East Australia.
- Natural Damp Grassland of the Victorian Coastal Plains.
- Subtropical and Temperate Coastal Saltmarsh.
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

Potential areas of two *Flora and Fauna Guarantee Act 1988* (FFG) listed threatened ecological communities, including:

- Cool Temperate Rainforest Community (CTRC).
- Coastal Moonah (*Melaleuca lanceolata* subsp. *lanceolata*) Woodland Community

Potential habitat for four significant flora species:

- Anglesea Grevillea (EPBC – vulnerable; FFG - endangered)
- Wrinkled Buttons (EPBC – endangered; FFG – critically endangered)
- Green-striped Greenhood (EPBC – vulnerable; FFG – endangered)
- Spiral Sun-orchid (EPBC – vulnerable; FFG critically endangered)

Fauna

Potential habitat for twenty-seven significant fauna species (refer to Table 8 within Appendix 20 for full list).

Landscape and Visual

The Landscape and Visual Assessment (refer to Appendix 15) has identified three Landscape Character Areas within two Landscape Character Types:

Otway Forests and Coast Character Type from Bells Beach to Cape Patton:

- Precinct 4.4: Low Coastal Heath Character Area (Fairhaven to Big Hill) characterised by coastal dunes and cliffs, interspersed with inlets. Inland topography is hilly and exposed, with low, dense vegetation. Distinctive for its rugged coastal scenery. The scenic quality of this area is considered moderate, due to the visibility of low density ribbon development.
- Precinct 4.1: Otway Ranges Forest and Coast Character Area (Big Hill to Cape Patton) characterised by large areas of dense forest cover in hilly terrain, extending to the sea in places. The vegetation is indigenous tall, closed forest with understorey – sparser in the dry forest areas, and denser in sheltered gullies. The precinct offers some of the most dramatic cliff and ocean scenery able to be viewed from a car or bus anywhere in the world. The scenic quality of this area is high.

Otway Foothills, Valleys and Uplands Character Type from Cape Patton to Marengo

- Precinct 2.4: Apollo Bay Coastal Valleys and Hills Character Area characterised by a backdrop of tall and steep, rugged hills, at the foot of which is gently rolling land, sloping down to the coast. Precinct 2.4 is distinctive as a location where a number of different landscape elements intersect in a dramatic manner: low sea coast, bayside townships, topographic edge of the Otway Ranges sweeping down to the narrow coastal strip, edge of the forest, and the incised, vegetated creek valleys. The scenic quality of this area is high.

Geotechnical Assessment

The GOR CT has been assessed for geotechnical risk to life of the individual, societal risk (risk to life considering multiple people) and risk to property (Appendices 10 and 12). The cumulative risk associated with traversing the entire trail has also been considered.

Areas of elevated risk are predominately related to rockfall originating from existing cuttings.

Only one segment (being Cumberland River to Wye River) identified a risk that was considered unacceptable to societal risk to life. Risk mitigation actions have been recommended and will be implemented during the project's construction stage reducing the risk to an acceptable level.

Three trail segments, although considered to be within the tolerable range, were close to not being considered acceptable and consequently risk mitigation measures have also been recommended for these segments.

All remaining segments have been assessed as subject to a tolerable or acceptable risk.

9. Land availability and control

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

☒ Yes If yes, please provide details.

Approx. Ninety-two percent (92%) of the GOR CT lies within the Great Otway National Park.

However, existing trail also passes through multiple coastal reserves:

- Lorne - Queenscliff Coastal Reserve.
- Apollo Bay Coastal Reserve.
- Cumberland River Coastal Camping Reserve.
- Elliot River - Addis Bay Coastal Reserve.
- Kennett River Coastal Reserve.
- Kennett River Water Frontage.
- Lorne Coastal Reserve.
- Lily Pond Bushland Reserve.
- Queens Park.
- Wye River Coastal Reserve.
- Wye River Water Frontage.

Currently, the potential to use a small section of freehold land is being considered at location/Fairhaven in consultation with agreement of the private landowner. The land would be used in an agreement with private landowner and not acquired. However, the current trail alignment also includes a section of trail via Crown land if an agreement cannot be reached.

Current land tenure (provide plan, if practicable):

The GOR CT is proposed on numerous parcels of 'reserved' Crown land, predominantly managed by either Parks Victoria or GORCAPA. Refer to Appendix 21 for all Crown Folio statements.

- Great Otway National Park – Reserved Crown land managed by Parks Victoria.
- Lorne - Queenscliff Coastal Reserve - Reserved Crown land managed by GORCAPA.
- Apollo Bay Coastal Reserve – Reserved Crown land managed by GORCAPA.
- Cumberland River Camping Reserve - Reserved Crown land managed by GORCAPA.
- Elliot River - Addis Bay Coastal Reserve - Reserved Crown land managed by Parks Victoria
- Kennett River Coastal Reserve - Reserved Crown land managed by GORCAPA.
- Kennett River Water Frontage - Reserved Crown land managed by GORCAPA.
- Lorne Coastal Reserve – Reserved Crown land managed by GORCAPA.
- Lily Pond Bushland Reserve - Reserved Crown land managed by GORCAPA.
- Queens Park - Reserved Crown land managed by DEECA.
- Wye River Coastal Reserve - Reserved Crown land managed by GORCAPA.
- Wye River Water Frontage - Reserved Crown land managed by GORCAPA.

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

No changes to the tenure of Crown land are proposed.

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

On 21 March 2024, the Eastern Maar were recognised as native title holders for the remaining portion of their Registered Aboriginal Party area, following a previous determination on 28 March 2023.

The determination means Eastern Maar have the following rights and interests:

- access or enter and remain on the land and waters.
- Camp on the land and waters landward of the high-water mark of the sea.
- Use and enjoy the land and waters.
  Take the resources of the land and waters.
- Protect places and areas of importance on the land and waters.

10. Required approvals

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

Commonwealth

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act):
The project has potential to impact EPBC Act listed Wrinkled Buttons. A referral under the EPBC Act is currently being undertaken in parallel with this EE Act referral.

Native Title Act 1993 (NT Act)
Eastern Maar hold procedural rights in accordance with the 'future act regime' under the NT Act.

State

Flora and Fauna Guarantee Act 1988 (FFG Act)

- A number of FFG-listed species have been recorded within the project area, which is largely contained to land classified as public land for the purposes of the FFG Act. A protected flora permit will be required to remove any FFG Act-protected flora species.
- Biodiversity Duty for Public Authorities - section 4B of the FFG Act requires public authorities to give 'proper consideration' to matters of biodiversity when exercising their functions.

Planning and Environment Act 1978 (PE Act)
There are three potential planning approvals pathways under the PE Act applicable to the GOR CT, these are:

- Ministerial Amendment (Section 20(4) or Section 20(5) of the PE Act).
- Lodgement of planning permit applications under the Surf Coast and Colac Otway Planning Schemes.
- Clause 52.30 (State projects).

Water Act 1989 (Water Act)
A Works on Waterways permit is required under the Water Act for works (including construction of trails and bridges) and vegetation removal which occurs through, over and in proximity to designated waterways.

Marine and Coastal Act 2018 (MC Act)
Consent is required under Section 65 of the MC Act to use or develop, or undertake works on, marine and coastal Crown land.

National Parks Act 1975 (NP Act)
Consent from Parks Victoria is required under Section 27 of the NP Act.

Aboriginal Heritage Act 2006 (AH Act)
The study area is within an area of cultural heritage sensitivity and the proposed activities are considered high impact activities under the Aboriginal Heritage Regulations 2018 (the AH Regulations). A mandatory Cultural Heritage Management Plan (CHMP number 19854) is currently under preparation.

Heritage Act 2017 (Heritage Act)
A permit from Heritage Victoria is required as per the requirements of the *Heritage Act 2017*, as the Great Ocean Road (H2261) will be impacted by the proposed works.

Have any applications for approval been lodged?

☒ No ☒ Yes If yes, please provide details.

A 'Pre-referral' meeting has been undertaken with the Commonwealth Minister for Environment with respect to the EPBC Act and an application is expected to lodged in August/September 2024. underway.

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

- Department of Climate Change, Energy, the Environment and Water
- Department of Energy, Environment and Climate Action
- Parks Victoria
- Surf Coast and Colac-Otway Shire Councils
- Eastern Maar Aboriginal Corporation
- Regional Roads Victoria

Other agencies consulted:

- Great Ocean Road Coast and Parks Authority
- Department of Jobs, Skills, Industry and Regions

- Regional Development Victoria
- Life Saving Victoria
- Great Ocean Road Regional Tourism
- Country Fire Authority

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):

The following environmental values have potentially significant effects:

- Historic Heritage
- Native Vegetation
- Landscape and Visual
- Aboriginal Cultural Heritage.
- Threatened Species and Communities

Historic Heritage
A desktop assessment of potential impacts to historical heritage places was undertaken by Biosis (Appendix 8) and the design of the GOR CT project has considered the locations of heritage places.

A total of 17 registered historic heritage places/sites were located within the initial study area, including places and sites on the National Trust Register, Heritage Overlay, Victorian Heritage Inventory, Victorian Heritage Register and National Heritage List. While a total of seven historic heritage places and sites are directly adjacent to the study area.

Six of the registered historic heritage places/sites are located within the proposed construction corridor (i.e. sections of new trails). The additional eleven places are located within sections of existing trails and will not be impacted by any construction works for new trail sections and are also unlikely to be impacted by any maintenance/upgrade works.

The *Great Ocean Road Coastal Trail: Cultural Heritage Values Desktop Assessment* (refer to Appendix 8) included a preliminary site inspection which did not record any areas of suspected historic places or objects. The assessment considered the risk of harming any historic heritage places/sites to be moderate; however, recommended that a historic heritage assessment be undertaken (including a physical survey) of each place.

A historic heritage assessment is currently underway and a Heritage Impact Statement will also be prepared to assist with a future permit application under the *Heritage* Act 2017. The permit application process will ensure that the views of Heritage Victoria are considered and the potential for unintended or unknown harm to historic heritage places and sites (recorded and unrecorded) is reduced.

Aboriginal Cultural Heritage
A desktop assessment of potential impacts to Aboriginal cultural heritage places was undertaken by Biosis (Appendix 8). The project area is within the traditional lands of the Eastern Marr people and falls in the Registered Aboriginal Party area of the Eastern Marr Aboriginal Corporation.

The desktop assessment found:

- Seventy-two Aboriginal places comprising eighty-three components to be registered within the geographic region. Fifty-six registered Aboriginal places consisting of sixty-four individual place components to be registered within 50m of the study area.
- Potential for unidentified Aboriginal cultural heritage to be present within the study area, particularly on elevated landforms (e.g., hills, dunes and ridges) and in proximity to freshwater/resources obtained in coastal waters. They will most likely be comprised of Shell Middens followed by Artefact Scatters, Object Collections, Low Density Artefact Distributions, Earth Features (Soil Deposits) and Aboriginal Ancestral Remains (Burial).

The GOR CT project area is within an area of cultural heritage sensitivity and construction of a walking trail is considered a high impact activity under Regulation 7 of the *Aboriginal Heritage Regulations* 2018. Consequently, there is a requirement to prepare a mandatory cultural heritage management plan under Section 46 of the *Aboriginal Heritage* Act 2006.

Field assessments associated with a Cultural Heritage Management Plan have been completed and is expected to be finalised in October 2024. All Aboriginal cultural heritage that is discovered will be managed in accordance with the contingency plan detailed within the CHMP.

Native Vegetation
Native vegetation removal associated with the project consists of:

- Up to 8.9194 of understory for the construction of the new trail (GTR3) and full removal of vegetation for the abutments of three swing bridges.
- Six (6) large trees (including four FFG Act listed Southern Blue-gum) for construction of the bridge abutments.
- Disturbance to habitat of four EPBC Act listed flora species recorded or predicted to occur within the trail corridor including: Wrinkled Buttons, Anglesea Grevillea, Green-striped Greenhood, and Spiral Sun-orchid.

Threatened species and communities
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
EPBC Act Flora
Four listed flora species have been recorded or were considered to have a medium or greater likelihood of occurring within the assessment corridor, these are:

- Anglesea Grevillea
- Green-striped Greenhood
- Wrinkled Buttons (recorded)
- Spiral Sun-orchid

Specific targeted field surveys to determine the presence of these flora species were undertaken by Biosis Pty Ltd during the weeks of:

- 24 August to 25 August 2023.
- 18 September 2023.
- 4 December 2023 to 7 December 2023.

Neither Anglesea Grevillea, Green-striped Greenhood or Spiral Sun-orchid were identified within the assessment corridor.

Populations of Wrinkled Buttons were recorded within the assessment corridor during the December 2023 targeted surveys. However, the project is considered unlikely to have a significant impact on Wrinkled Buttons and a referral under the EPBC Act is currently underway.

EPBC Act Fauna
Potential impact to the habitat of thirteen fauna species has been identified, most of which are deemed temporary in nature (e.g. during the construction phase), or of a relatively minor scale due to the linear nature of the impact and the restriction of the impact to understorey habitat, these include: Gang-gang Cockatoo, White-throated, Needletail, Swamp Antechinus, Long-nosed Potoroo, Broad-toothed Rat, Southern Brown Bandicoot, Grey-headed Flying-fox, Southern Bent-winged Bat, Yellow-bellied Glider, Australian Grayling, Latham's Snipe, Blue-winged Parrot and Diamond Firetail.

The project is considered unlikely to have a significant impact on threatened fauna.

EPBC Act Communities
Five listed ecological communities have been recorded or are predicted to occur in the project search area (i.e. within 2km of project). However, only two (2) communities are likely to be intersected by the trail and these will be at locations where existing bridges and roads are proposed to be utilised. Consequently, impacts to threatened ecological communities is considered to be minor.

Flora and Fauna Guarantee Act 1988 (FFG Act)
Eighty-seven protected flora species and six threatened fauna species listed under the FFG Act only were recorded within the project area (i.e. within 2km of project). No FFG Act threatened communities were recorded.

FFG Act Flora
Three listed species were recorded within the assessment corridor (i.e. 10 metres either side of the trail centreline), these are:

- Brooker's Gum
- Southern Blue-gum
- Paper Flower

The trail alignment has been amended to avoid impacts to Paper Flower and providing trail construction methodologies follow recommendations outlined in the Arborists report (refer to

Appendix 9 within Attachment 22), Brooker's and Southern Blue gums will not be adversely impacted by the project.

FFG Act Fauna
Three listed species were recorded within the assessment corridor (i.e. 10 metres either side of the trail centreline), these are: Grey Goshawk, Powerful Owl, Rufous Bristlebird, White-bellied Sea Eagle, Otway Black Snail and Otway Burrowing Crayfish:

Each species was observed within the project area, with the exception of Otway Burrowing Crayfish which is assumed present based on the occurrence of crayfish burrows.

The project is unlikely to have a significant impact on Grey Goshawk, Powerful Owl, Rufous Bristlebird and White-bellied Sea-eagle, due to their high mobility and large extent of surrounding habitat. Hollow-bearing trees will be avoided via construction techniques and micro-siting of trails.

Impacts to Otway Burrowing Crayfish and Otway Black Snail have been reduced with the avoidance of Wet Forest EVC and will be further minimised by utilising existing walking trails and constructing boardwalks and bridges over creek lines. Additionally, residual impacts can be further mitigated through micro-siting trails and salvage and relocation.

FFG Act Communities
No threatened communities were recorded within the assessment corridor.

Landscape and Visual
Landscape Value
The Landscape and Visual Impact Assessment (refer to Appendix 15) considers the entire project area to be a significant landscape based on its natural, cultural heritage or scenic value.

The following is recognised:

- Coastline and Otway Ranges from Breamlea to Lorne - State Significance.
- Coastline from Lorne to west of Kennett River – National Significance.

Visual Impact Assessment
Seven sensitive visual receptors have been identified within the project area. The significance of potential adverse impacts is considered 'low' for four of these receptors, these being:

- Residential – township context.
- Road User – township context.
- Tourism – township context
- Sea-Going.

The significance of potential adverse impacts for the remaining three sensitive visual receptors are considered either 'low' or 'moderate' in most instances, with 'high' impact exceptions for:

- Residential – rural context, incl. isolated houses near Cumberland and Kennett rivers.
- Tourism – rural context, incl. St George's River Mouth, Cumberland River Holiday Park and Addis Bay Beach.
- Road User, including the tramway and Mount Meuron area along the GOR.

Landscape Character Assessment
The study area was deemed to be of moderate sensitivity to the changes that will result from the project. The significance of anticipated impacts on landscape character is deemed to be 'low'.

Cumulative Assessment
Cumulative impacts are considered to be of 'low' significance, except in the following situations:

Moderate impact

- Cathedral Rock Lookout and trails in context of houses pockmarking the naturally vegetated hills, and the GOR clearly visible along the coast.

High impact

- Tramway Lookout and trails in the context of two existing lookouts against a prominent, naturally vegetated headland.
- Castle Rock and Langdale Pike Lookout, Cumberland Winterbrook Suspension Bridge and trails at Cumberland River in the context of the Cumberland Holiday Park which is partially visible within a naturally vegetated environment.
- Tramway Lookout South of Lorne where the trail follows the headland before heading up St George River valley.
- The entire section of trail from Jamieson Creek to Kennett River and west to Mount Meuron Premier Lookout, where the trail runs close to the road in the hills above.

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.

What investigation of native vegetation in the project area has been done? (briefly describe)

The GOR CT project has undergone four phases of design investigations. Each resulted in changes to the trail alignment (and associated infrastructure locations) in response to values and risks identified via community feedback and/or technical studies. This included avoidance and minimisation measures for native vegetation and threatened species impacts.

Detailed flora field assessments were undertaken by Biosis Pty Ltd during the weeks of:

- 23 May to 27 May 2022.
- 20 June to 24 June 2022.

A total of approximately 300 hours was spent surveying the assessment corridor along 38.5km of trail. During this time approx. 2.5km of trail was not surveyed due to late design changes around the Cumberland River area. Further amendments were made to the alignment in 2023/2024, with some optional trails being removed. New sections of GTR 2 that were not previously assessed under the GTR1 assessment were investigated in March 2024. Targeted surveys for threated flora species listed under the EPBC Act were also completed.

The flora targeted surveys were undertaken by Biosis Pty Ltd during the weeks of:

- 24 August to 25 August 2023.
- 18 September 2023.
- 4 December 2023 to 7 December 2023.

The FFA (refer to Appendix 20) identifies ecological values recorded within a 20m wide assessment corridor and 2.5m wide project footprint area. The assessment includes:

- Vegetation Quality Assessment, using the Habitat Hectares method (DSE 2004).
- Recording of location, Diameter at Breast Height (DBH), species and habitat features of scattered trees and large trees (in accordance with *Guidelines for the removal, destruction or lopping of native vegetation*, DELWP 2017 – the Guidelines).
- Recording of the location of any observed threatened flora and fauna species.
- Assessing recorded patches of native vegetation (in accordance with the Guidelines) against the criteria of listed threatened ecological communities listed under the EPBC Act and the FFG Act.
- Recording and mapping the extent of potential habitat areas for listed threatened flora and fauna species.

Mapping vegetation removal and tree protection zones

Native vegetation impacts will generally be the result of a shallow, low impact construction technique, consisting of ground and organic layer removal, followed with minimal shaping of the mineral earth below. Most canopy forming trees and immature trees according the EVC benchmarks will be avoided.

The proposed trail construction footprint consists of a 1.2m built trail surface and a 0.6m buffer on both sides (1.2m total) to allow for benching, earthworks and/or drainage. This equates to a 2.4m wide construction footprint and vegetation removal area. A 2.5m wide construction corridor has been used to quantify environmental impacts.

The additional 1.2m wide construction buffer will not be required for most of the new sections of trail. Consequently, the actual total area of native vegetation removal associated with the project is expected to be significantly less than currently quantified.

Where small-scale elevated structures are proposed, the vegetation under these structures has also been ‘deemed lost’ through applying a 2.5m wide construction corridor. However, recent examples from other walking trail projects in Victoria and New South Wales has demonstrated that this vegetation is likely to persist under structures that allow rainfall and light to penetrate to the ground.

Where large scale, swing bridges are proposed across steep-sided ravines, the vegetation beneath has not been deemed lost, as the height of the bridge is not anticipated to significantly

impact the vegetation below. Instead, a construction footprint has been applied for each abutment supporting the bridge at either end.

Tree Protection Zone (TPZ) impacts of trees within the trail assessment corridor have been assessed by an independent arborist (refer to Appendix 9 within Appendix 20). This assessment considers TPZ impacts to be minimal, provided construction recommendations are followed to protect root systems and tree trunks.

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

☒ NYD Estimated area 8.9194 hectares (hectares)

Maximum impact to native vegetation associated with the project includes:

- 8.9194ha (understorey only) with a Strategic Biodiversity Value range between 0.515 – 1.000, and
- six large trees.

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

☒ N/A …… approx. percent (if applicable)

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

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

The EVCs likely to be impacted by the project are:

Ecological Vegetation Class (EVC)	Status	Condition State	Area of Impact (ha)
Otway Plain Bioregion			
Heathy Woodland (EVC 48)	Least Concern	High	0.089
Otway Ranges Bioregion			
Lowland Forest (EVC 16)	Depleted	High	0.3
Riparian Forest (EVC 18)	Least Concern	Low High	0.047 0.15
Shrubby Dry Forest (EVC 21)	Least Concern	Moderate High	0.08 2.7
Shrubby Foothill Forest (EVC 45)	Least Concern	Low Moderate High	0.06 0.65 3.9
Heathy Woodland (EVC 48)	Least Concern	Moderate High	0.01 0.13
Coastal Headland Scrub (EVC 161)	Depleted	Low Moderate High	0.1 0.17 0.08
Shrubby Wet Forest (EVC 201)	Least Concern	High	0.32

Have potential vegetation offsets been identified as yet?

☒ NYD ☒ Yes If yes, please briefly describe.

Attribute	Outcome	Notes
General Habitat Units		
Offset amount: general habitat units	0.432	
General offset vicinity		The offset site must be located within the same Catchment Management Authority boundary or

		municipal district as the native vegetation to be removed.
General offset minimum Strategic Biodiversity Value Score	0.676	
Species Habitat Units		
Offset amount: Species habitat units	7.525	6.501 for Wrinkled Buttons 0.865 for Coast Correa 0.024 for Otway Black Snail 0.135 or Southern Blue-gum
Large tree attributes	6 large trees	The offset must include protection of at least one large tree for every large tree to be removed.

Scenario 1
Clause 52.17-7: Table of exemptions under the Colac-Otway and Surf Coast Shire planning schemes exempts the need for a planning permit for native vegetation removal where:
'*Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to manage Crown land:*

- *by or on behalf of the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987), the Great Ocean Road Coast and Parks Authority or Parks Victoria, and in accordance with the Procedure for the removal, destruction or lopping of native vegetation on Crown land; or*
- *with written permission from the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987)'*.

If removal of native vegetation is considered exempt, offsets are not formally required. However, in their place, in accordance with the *Procedure for the removal, destruction or lopping of native vegetation on Crown land* impacts are counterbalanced via either Environmental (e.g., Vegetation establishment, habitat restoration and/or pest plant/animal control) and/or Management (e.g., removal of licences, leases/permits or changes of tenure, ecological grazing/watering/burning and/or thinning, road closures and/or acquisition of land into parks and reserves) activities.

The *Procedure for the removal, destruction or lopping of native vegetation on Crown land* states any works requiring the 'new removal of native vegetation' would require a detailed FFA which:

- Considers if the native vegetation removal impacts on important biodiversity values
- Ensures native vegetation is removed to the minimum extent necessary to construct the GORCT (to avoid and minimise impacts)
- Records and documents the extent of native vegetation removal
- Native vegetation removal must also be counterbalanced with the corresponding actions specified under the Crown land procedure

The assessment undertaken as part of the project's FFA (refer to Appendix 20) meets the above requirements and could be used to accompany an application under the Crown land procedure.

Scenario 2
Offsets are secured in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DEECA, 2017). An offset can be either a:

- First party offset – on the same property as the proposed removal of native vegetation, or on another property owned or managed by the party requiring the offset
- Third party offset – on another party's property. Third party offsets are traded as native vegetation credits.

A recent search on the Victorian Native Vegetation Credit Register has shown most of the projects offset requirements to be currently available, with exception to:

- 1.061 of Coast Correa
- 0.135 Southern Blue-Gum

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

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)

Flora
An overview of flora field assessments is provided in the Native Vegetation section immediately above.

Fauna
Detailed fauna assessments of the proposed project/trail alignment were undertaken by Biosis Pty Ltd between:

- 26 - 29 April 2022
- 17 - 18 May 2022

The fauna assessment included nocturnal surveys for arboreal mammals and forest owls, bird surveys and the deployment of 30 remote cameras to detect threatened and/or cryptic vertebrate fauna groups. Survey methodology/techniques included:

Nocturnal surveys
Two nights of nocturnal surveys to record nocturnal fauna species such as owls, possums, gliders and frogs across a combination of dry and wet forest types. Surveys used a combination of spotlighting from a vehicle and transects on foot, listening for bird and frog calls and the use of playback to elicit responses from owl species with potential to occur in the project area.

Bird surveys
Five bird survey sites were chosen to target a range of different habitat types. Bird surveys were undertaken at each survey site either in the morning and/or afternoon following the Birds Australia 2ha 20 minute bird survey method to maximise the number of species recorded. Birds were detected and identified visually and/or by calls.

Remote cameras
Remote cameras were primarily used to target ground-dwelling mammal species. However, the technique is also useful in detecting reptiles and birds. Thirty remote cameras were typically deployed in pairs, 100 metres apart, across a diversity of ecological vegetation classes. Cameras were attached to a tree trunk approximately 40 centimetres above ground level in order to target ground dwelling species and deployed facing a lure station located approximately 2 meters from the camera to lure animals within the camera's sensor range.

Surveys Accuracy
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.

***Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act)**
Twenty-two EPBC Act listed flora species and 81 EPBC Act listed fauna species have been recorded or predicted to occur in the project search area. The likelihood for each of these species occurring in the project area has been assessed and is outlined in Appendix 20.

Flora
Wrinkled Buttons was recorded within the assessment corridor. The project is considered unlikely to have a significant impact on Wrinkled Buttons. However, a referral under the EPBC Act is underway.

Fauna
Ten EPBC Act listed fauna species have been recorded or are considered to have a medium or greater likelihood of occurring within the assessment corridor, these are:

- Gang-gang Cockatoo (recorded)
- Broad-toothed Rat
- Southern Bent-winged Bat
- Southern Brown Bandicoot
- Swamp Antechinus
- Australian Grayling
- White-throated Needle-tail
- Grey-headed Flying-fox
- Long-nosed Potoroo (recorded)
- Yellow-bellied Glider

Communities
Five EPBC Act listed ecological communities have been recorded or predicted to occur in the project search area, these being:

- Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria ecological community.
- Giant Kelp Marine Forests of South East Australia.
- Natural Damp Grassland of the Victorian Coastal Plains.
- Subtropical and Temperate Coastal Saltmarsh.
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

Of these, only Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria ecological community, and Subtropical and Temperate Coastal Saltmarsh are likely to be intersected by the trail alignment. Where the intersect occurs, existing bridges and roads are proposed to be utilised. Consequently, no threatened ecological communities are likely to be significantly impacted by the project.

***Flora and Fauna Guarantee Act* 1988 (FFG Act)**

Eighty-seven protected flora species and six fauna species were recorded within the Project Area (i.e. within 2km of project), with potential habitat for a further nineteen fauna species.
Flora
Three FFG Act listed species were recorded within the assessment corridor (i.e. 10m either side of trail), these are:

- Brooker's Gum
- Paper Flower
- Southern Blue-gum

The trail has been realigned to avoid all impacts to Paper Flower. Whilst adherence to the construction methodologies recommendations outlined in the Arborist Report/Tree Management Plan (refer to Appendix 9 within Appendix 20) will ensure that Brooker's and Southern Blue gums will not be adversely impacted by the project.

Fauna
Nine FFG Act listed species were observed in the project area. The exception being Otway Burrowing Crayfish which has been assumed to be present based on the occurrence of crayfish burrows. These species include:

- Grey Goshawk
- Rufous Bristlebird
- Long-nosed Potoroo
- Otway Burrowing Crayfish
- Gang-gang Cockatoo
- Powerful Owl
- White-bellied Sea Eagle
- Yellow-bellied Glider
- Otway Black Snail

Most canopy trees will be avoided during trail construction and any selective removal or trimming of trees for safety reasons is likely to be minor in nature. Habitat suitable for Gang-gang Cockatoo, Yellow bellied Glider and Grey-headed Flying-fox will not be significantly impacted.

Impacts to Otway Burrowing Crayfish and Otway Black Snail have been reduced with the avoidance of Wet Forest EVC and will be further minimised by utilising existing walking trails and constructing boardwalks and bridges over creek lines. Residual adverse impacts will be further mitigated through micro-siting trails and salvage and relocation.

Communities
No FFG Act threatened communities were recorded within the assessment corridor.

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

None expected given the large area of established habitat in which the species have been observed nearby.

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.

The project is not expected to have a major impact on any threatened or migratory species, other species of conservation significance or listed communities. However, there is potential for construction works to have minor and localised effects that will be short to medium term (e.g. effects will be measurable in weeks or months) on:

- Spiral Sun-orchid
- Australian Grayling
- Grey Headed Flying-fox
- Swamp Antechinus
- White-throated Needletail
- Gang-gang Cockatoo
- Southern Bent-winged Bat
- Long-nosed Potoroo
- Southern Brown Bandicoot
- Yellow Bellied Glider

Is mitigation of potential effects on indigenous flora and fauna proposed?
☒ NYD ☒ No ☒ Yes If yes, please briefly describe.

The FFA (refer to Appendix 20) prepared by Biosis Pty Ltd has made a number of general and specific recommendations, all of which have either already been adopted via project location/design and/or will be adopted via measures to be prescribed in proposed Construction Environment/Operational Management Plans, these include:

General recommendations

- Avoid direct removal of canopy and hollow-bearing trees via micro-siting.
- Pre-construction site visits with contractors prior to any works to ensure all high value areas are avoided and protected.
- Restrict disturbance to track margins on existing trails.
- Adhere to the construction corridors and maintenance zones.
- Implement best practice trail design, construction and sediment management practices.
- Construct via 'building from the trail' within the construction footprint.
- Implement strict weed and pathogen hygiene protocols during construction and operation.
- Engage a suitably qualified arborist to advise on the management of trees during construction works, including inductions for all workers regarding:
  - Basic tree functions and impacts from trail.
  - Construction guidelines for working close to trees.
  - Procedure when roots are damaged and native vegetation offsets are required.
- Construction of bridges and protection of aquatic habitats to include:
  - Silt curtains or a coffer dams where appropriate.
  - Stockpiling of sediment (if required) as far away from the waterway as possible and managed so that it is secure against flooding, to at least the 1 in 10 year flood interval.

Specific recommendations

- Development of a weed control strategy.
- Development of a Cinnamon Fungus monitoring strategy.
- Development of a Construction and Environment Management Plan which outlines environmental controls and mitigation measures covering vegetation removal prescriptions/seasonality, work site delineation, weed/pathogen hygiene, sediment control and unexpected finds protocols and salvage protocols.
- Construction of elevated boardwalks, to reduce impacts on hydrology and/or soil compaction, when the walking trail intersects:
  - Ephemeral waterways and minor tributaries.
  - EVC 201 – Shrubby Wet Forest.
- Adherence to the construction methodology outlined in Axiom's Tree Management Plan (refer to Appendix 9 within Appendix 20) to reduce impacts on trees through the implementation of tree protection measures.
- Protect critical refuge habitat for small to medium sized ground-dwelling mammals through elevated boardwalks at trail 43/Coalmine Creek.
- Consider improving habitat and protecting environmental values via:
  - Improving vegetation for small mammals at Coalmine Creek.

- Installing interpretive signage emphasises the importance of habitat along the trail for threatened species.
- Undertake woody weed removal prior to constructing trail 70. Microsite the trail once Sweet Pittosporum has been removed to avoid / minimise disturbance to the high-quality understorey within EVC 161 – Coastal Headland Scrub (particularly within the Moderate and High condition states).

- Micro-site bridge abutments, where possible, to locate outside of TPZs, particularly of large trees and Southern Blue-gum.

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

NA

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.

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 GOR CT falls within the Corangamite Catchment Management Authority (Thompsons and Otway Coast sub-catchment area) and transects several waterways of varied stream types, from large named permanently flowing streams to lower order unnamed streams with flows only after rain events.

Large named permanently flowing streams

Points of interest where the project will transect large named permanently flowing streams with aquatic vegetation and fish habitat include:

Existing crossing no works required.

- Moggs Creek.
- Erskine River.
- Wye River.
- Kennett River.

New bridges – works on bank abutments only, no in stream works required.

- St Georges River, new 13m low level bridge alongside Allenvale Road.
- Jamieson Creek, new 10m low level bridge.
- Grey River, new 8m low level bridge.

Section 4.6 of the *GOR CT Style Guide & Construction Manual* (refer to Appendix 18) outlines the design details (incl. scope of works) for proposed bridges. The only waterway works proposed are the installation of concrete footings on bank abutments, no in stream works are required.

Stepping stone crossings.

- Cumberland River, two existing but proposed upgrades.

Section 4.4.3 of the *GOR CT Style Guide & Construction Manual* (refer to Appendix 18) outlines the proposed execution, installation and quality specifications for stepping stone crossings. Waterway crossings have been minimised to avoid disturbance to riparian corridors and have only been considered in the case of slow moving, small and narrow water courses. Each will allow the water course to continue unimpeded and no pipes or culverts will be required.

Additionally, Section 5 of the *GOR CT Supplementary Trail Alignment, Field Surveys and Geotechnical Investigations Report* (World Trail Pty Ltd, June 2024 - refer to Appendix 25) outlines the proposed construction methodology for stepping stone crossing, which includes:

- Placement of stepping stones using rock-slings (a technique that allows rocks to be moved by 4 people), crow bars, rock bars and/or wedges.
- Winching or floating may be required for boulders that are not able to be safely lifted.

Lower order unnamed streams with flows only after rain events

Several lower order unnamed streams with flows only after rain events will be intersected by the proposed trail alignment. In most of these instances a culvert crossing is required and consequently a *Works on Waterways* permit under the *Water* Act 1989. The Corangamite CMA have been consulted throughout the projects planning and all culvert crossings will be designed and constructed in accordance with the *Guidelines for Assessment of Applications for Permits and Licences for Works on Waterways (*Sinclair Knight Merz, 2001 – refer to Appendix 29), particularly with respect to the level, height and minimum preferred structure for fish passage.

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

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

The project area contains numerous freshwater aquatic and riparian habitats that support a diversity of locally common species of frogs, fish, mammals, sensitive macroinvertebrates (e.g. Stoneflies and Caddisflies) as well as FFG Act listed Platypus, Otway Burrowing Crayfish and Otway Bush Yabby.

However, the FFA Assessment (refer to Appendix 20) has concluded that providing both general and specific mitigation measures are adhered to, the potential for protected aquatic biota, to be injured, damaged or destroyed is considered to be negligible.

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.

There are no Ramsar or DIWA wetlands potentially directly or indirectly affected by the project. The nearest DIWA wetland is the Lake Connewarre State Wildlife Reserve, located 38 km northeast of the project area.

Could the project affect streamflows?

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

While there are numerous watercourses in proximity to the project work areas and fourteen low level bridge crossings, there will be limited instream works required to support the construction of new trail and associated infrastructure.

During construction, there may be minor and tempory impacts on stream flows during installation of culverts etc, however once works are completed, stream flows will resume.

Some impacts associated with tempory construction vehicle access at select water courses may occur, but tempory crossings can be appropriately sited, designed and constructed to maintain flows. Appropriate measures will also be implemented during construction to prevent erosion and sediment impacts on waterways.

Given the limited nature of works in or adjacent to waterways, impacts on stream flows are considered negligible.

The projects Flora and Fauna Assessment (refer to Section 6.3 within Appendix 20) outlines a number of recommendations regarding precautions and mitigations relevant to the protection of waterway and fish habitat. All measures will be adopted and implemented via a proposed Construction and Environmental Management Plan tied to or required by a condition of project approval to ensure a high level of environmental compliance and third-party compliance monitoring. These measures will include (but not necessarily limited to):

- Silt curtains (or a coffer dam) to be deployed around all aquatic work sites, to protect water quality.
- If a stockpiling of sediment is required, it will be located beyond the 1 in 10-year flood interval.
- All runoff from stockpiled sediment will be managed to prevent any sediment entering a waterway.
- Instream works are largely avoided, except for stone step crossings. These will be undertaken during low flow periods and calm weather conditions.
- Erosion and sediment controls to protect against any impacts to water quality or indirect impacts to retained vegetation.
- All sections of waterway banks impacted or modified by works will be remediated to resemble the pre-works condition.
- Soil transportation will be minimised within, into or out of the project area to reduce the spread of weeds.

Could regional groundwater resources be affected by the project?

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

Given the limited depth of proposed excavation works, regional groundwater resources will not be affected.

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)

There is very low potential for water environments to be affected, as the project does not involve surface water or groundwater extraction or use.

Major construction activities are not proposed across or immediately adjacent to any waterways. All creek and waterways crossings will be small clear span elevated structures to avoid impacts on the beds and banks of streams (freshwater aquatic habitats). Works will be limited to minor trail crossings (including culverts) and/or placement of stepping stones.

There is limited aquatic habitat within the project areas which would be impacted by project activities. Site environmental controls can be applied to mitigate potential impacts on aquatic habitats and consequently no impact to beneficial uses of the water environments are predicted.

During construction, all works will be required to comply with SEPP (Waters) for the protection of beneficial uses of waterbodies. Contractors will be required to undertake construction works in accordance with a CEMP to manage identified environmental risks to water quality and streamflow's.

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

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

The project intersects several named waterways and unnamed drainage lines. The main waterways include:

For existing trail (negligible works):

- Moggs Creek
- Erskine River
- Cumberland River
- Wye River
- Kennett River

For new trail (minor works):

- St Georges River
- Cumberland River
- Grey River

The trail will involve minor construction (e.g. installation of a culvert) and/or maintenance activities affecting the beds and banks of the following designated waterways:

- Anderson Creek
- Brown Creek
- Coalmine Creek
- Grassy Creek
- Hitchcock Gully
- Jamieson Creek
- Moggs Creek
- Monash Gully
- Reedy Creek
- Separation Creek
- Sheoak Creek
- Spout Creek
- Stony Creek.

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.

Based on the limited nature of the works proposed at or adjacent to waterways, the shallow nature of works, the ability to incorporate design treatments and/or apply site-based construction management techniques to avoid and minimise impacts, it is not expected that extensive or major effects on the health or biodiversity of aquatic and estuarine ecosystems will occur.

Is mitigation of potential effects on water environments proposed?

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

A Construction Environment Management Plan (CEMP) will be prepared in consultation with relevant stakeholders and government authorities prior to any works occurring. It is expected that at a minimum the CEMP will include:

- Requirements of any Works on Waterways permits and SEPP (Water).
- Guidelines and practices such as the EPA Publication 480, *Environmental Guidelines for Major Construction Sites* in particular:
  - Erosion and sediment control.
  - Management of contaminated stormwater.
  - Procedures for working adjacent to waterways and floodplains.
  - Spill management procedures.
  - Contingency measures in the event groundwater is intercepted during construction.
- Specific site-based controls consisting of:

- minor containers storing hydrocarbons or chemicals will be stored on bunded pallets or in fully bunded areas at all times. • Refuelling of mobile plant and equipment on designated hardstand areas and/or provided with temporary bunding to contain any spills. • Designated wash-out pits for concrete trucks or pumps. • Retention of existing vegetation where feasible. • Reinstatement of vegetation in cleared areas as soon as practicable. • Sediment fences and bunding during construction works to prevent erosion and sedimentation of waterways and their embankments. • On site spill kits being available.
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. Assessment

Refer to Appendix 15, *Great Ocean Road Coastal Trail, Landscape and Visual Assessment* prepared by Tract Pty Ltd.

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.

Surf coast Shire

- Environmental Significance Overlay – Schedule 1
- Environmental Significance Overlay – Schedule 4
- Significant Landscape Overlay – Schedule 1

Colac Otway Shire

- Environmental Significance Overlay – Schedule 2
- Environmental Significance Overlay – Schedule 4
- Significance Landscape Overlay – Schedule 2
- Significant Landscape Overlay – Schedule 3

- **Identified as of regional or State significance in a reputable study of landscape values?**

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

The project area is located within landscapes recognised at both State and National levels, this includes:

- Coastline and Otway Ranges from Breamlea (in the north beyond the study area) to Lorne - State Significance.
- Coastline from Lorne to west of Kennett River – National Significance.

- **Within or adjoining land reserved under the *National Parks Act 1975* ?**

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

Approx. ninety-two percent (92%) of GOR CT's trail network is proposed within the Great Otway National Park managed by Parks Victoria.

- **Within or adjoining other public land used for conservation or recreational purposes ?**

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

Coastal reserves include:

- Lorne - Queenscliff Coastal Reserve
- Wye River Water Frontage
- Kennett River Coastal Reserve
- Lorne Coastal Reserve
- Queens Park
- Cumberland River Coastal Camping Reserve
- Apollo Bay Coastal Reserve.
- Elliot River - Addis Bay Coastal Reserve
- Kennett River Water Frontage
- Lily Pond Bushland Reserve
- Wye River Coastal Reserve

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

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

The Landscape and Visual Impact Assessment (refer to Appendix 15) has identified a number of sensitive visual receptors/values that GOR CT has potential to affect, these are:

- Residential (township context)
- Tourism and Recreation (township context)
- Road users (township context)
- Sea Goers
- Residential (rural context)
- Tourism and Recreation (rural context)
- Road users (rural context)

Impacts are expected to be the result of vegetation clearing along the trail alignment and at infrastructure points, people on the trail, as well as the infrastructure itself. Vegetation clearing will be most prominent along sections of the trail where the receptor's relative position and orientation results in a viewing corridor along the alignment.

The Landscape and Visual Impact Assessment has graded the significance of potential landscape and visual impacts into three grades, these being, low, moderate, and high. The significance of visual impacts associated with the project has been determined to be 'low' in almost all instances; however, there are some exceptions as outlined below:

Receptors	Significance	Exceptions
Residential, Tourism and Road User – township Sea-Going	Low	
Residential - rural	Low	Moderate impact for isolated houses: • between Moggs Creek and Lorne High impact for isolated houses: • near Cumberland River • south of Kennett River.
Tourism (rural context)	Low	Moderate impact for Cumberland River Beach High impact for: • St George's River Mouth. • Cumberland River Holiday Park. • Addis Bay Beach.
Road User	Low	Moderate impact for: • Springs area along the GOR. • Mount Defiance area along the GOR. • WB Godfrey Memorial and areas to the immediate north and south along the GOR. • Areas to the immediate north and south of the Coastal South along the GOR. High impact for: • Tramway area along the GOR. • Mount Meuron area along the GOR.

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

☐ NYD ☐ No ☒ Yes Please briefly explain response.

The Landscape and Visual Impact Assessment (LVIA – refer to Attachment 14) considers the entire project area to be a significant landscape based on its natural, cultural heritage or scenic value.

The following is recognised:

- Coastline and Otway Ranges from Breamlea (in the north beyond the study area) to Lorne - State Significance.
- Coastline from Lorne to west of Kennett River – National Significance.

Is mitigation of potential landscape effects proposed?

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

The LVIA contains numerous recommendations, both general and specific, all of which have already been adopted or will be via detailed design refinements, construction methodology and rehabilitation/revegetation measures, these include:

Design measures that have already been adopted:

- Site development maximises retention of existing vegetation and views to the ocean.

- Between townships, development has been set back a substantial distance from the Great Ocean Road on the landward side, wherever possible.
- Existing indigenous coastal vegetation has been avoided wherever possible.
- Design minimises the loss of canopy trees and understorey wherever possible.
- Development is generally below the dominant tree canopy height.
- The use of existing trail network has minimised the need for earthworks.
- Since the development of the Master Plan many of the proposed new lookouts have been downgraded in classification (from premier to major or from major to minor) which addresses many of the recommendations in the LVIA.

In addition to the above, relevant Best Practice Policies that have already been adopted in order to protect visual qualities have included (from *Siting and Design Guidelines for Structures on the Victorian Coast* (DEWLP, 2020):

- Avoidance of breaks in the canopy-line of vegetated areas.
- Avoidance of development on ridge lines and primary coastal dune systems, where ever possible.
- Enrich and frame existing views to and from the coast.
- Locate structures so that they are visually unobtrusive from public areas of beach, foreshore and the water.
- Maximise public viewing opportunities.
- Retain existing views to and from the water or along the coast.

Construction Phase:
During construction, potential issues relating to visual impact will be further mitigated through the adoption and implementation of the following measures:

- Maintenance of open lines of communication with the local community to facilitate transparency and community awareness, to allow issues, complaints and feedback to be heard and addressed.
- Ensuring that vegetation is not unnecessarily removed to make way for the construction of the trail and infrastructure.
- Reducing the construction period through careful logistical planning and productive implementation of resources.
- Planning the placement of laydown areas and temporary construction equipment camps in order to minimise vegetation clearing (i.e. in already disturbed areas) wherever possible.
- Restricting the activities and movement of construction workers and vehicles to the immediate construction site and existing access roads.
- Ensure that rubble, litter, and disused construction materials are appropriately stored (if not removed daily) and then disposed regularly at licensed waste facilities.
- Reduce and control construction dust using approved dust suppression techniques as and when required (i.e. whenever dust becomes apparent).
- Restrict construction activities to daylight hours in order to avoid lighting impacts.
- Ensure that all infrastructure and the site and general surrounds are maintained and kept neat.
- Progressively rehabilitate all disturbed areas, construction areas, roads, slopes etc immediately following the completion of works.
- Rehabilitate / screen the substructure of cantilevered lookouts to lessen visual impact.
- Use plant species that match EVC plant types – consult and follow and ecologist's specification for rehabilitation within each EVC.
- Monitor rehabilitated areas and implement remedial actions as required.

Reflective surfaces:

- Design infrastructure such as steel surfaces or balustrade fences to be non-reflective and with matt finish, low colour contrast material.
- Using colour treatments.
- Use irregular patterning.
- Maintenance of existing site vegetation.
- View management through screen planting.
- Minimising the need for lighting.

Operation Phase
Once construction is complete, it is assumed that the visual impact of the new trail and infrastructure will recede as construction areas rehabilitate and vegetation re-establishes in disturbed areas.

Specific Mitigation Measures:
For impacts that cannot be acceptably mitigated through general measures, a number of specific design interventions have been adopted, these include:

- The Cumberland Winterbrook Suspension Bridge and the Mount Meuron Lookout will be revisited in detail design phase, in terms of siting and/or design, to ensure the preservation of the scenic quality and integrity of the landscape character of this iconic region. Key considerations are interruptions to the ridgeline / skyline, prominent forms uncharacteristic of the receiving natural landscape (i.e. straight lines), and the high visibility of design elements that are at odds with the baseline conditions to the extent that these conditions are irreparably altered. Detail design will be undertaken with ZVI's and wireframe modelling utilised as a tool for ensuring such.
- The detail design of the Mount Defiance and Cathedral Rock Lookouts will be undertaken with wireframe modelling done from both directions to test the visibility of the final designs. Where necessary, slight amendments to the position should be undertaken to protect the ridgeline view. Key considerations are interruptions to the ridgeline / skyline, prominent forms uncharacteristic of the receiving natural landscape (i.e. straight lines), and the high visibility of design elements that are at odds with the baseline conditions to the extent that these conditions are irreparably altered.
- The existing section of trail that rounds the headland south of Lorne (Tramway Track) Walk and gives access to the Tramway Lookout is a visually prominent area. No additional vegetation clearing which would constitute a significant visual impact will occur.
- Where the route is closest to the GOR (at Ocean View Lookout, at Cathedral Rock Lookout and from Jamieson Creek to Kennett River, the final position and alignment of the trail has been designed to avoid view corridors of cleared vegetation. Where existing trails are utilised, and / or where there are view corridors, screening will be investigated at suitable points along the Great Ocean Road and from other sensitive visual receptors using appropriate vegetation (refer to relevant EVC's).
- The Ocean View Lookout will no longer be expanded (as proposed in the Master Plan), and the existing lookout footprint and design will be maintained to ensure that the lookout infrastructure does not interrupt the ridgeline when viewed from either direction.

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.

Excavation works are primarily associated with new trail conduction and bridge works. Potential land stability impacts are expected to be minor. Potential erosion impacts will be managed through standard mitigation measures during construction such as minimising stripping and topsoil removal, use of bunding and sediment fences during construction works.

Are there geotechnical hazards that may either affect the project or be affected by it?
☒ NYD ☒ No ☒ Yes If yes, please briefly describe.

The Geotechnical Risk Assessment (refer to Attachment 12) identified eleven discreet sites where application of risk mitigation measures would reduce the cumulative geotechnical risk for the entire length of trail.

Each of the eleven discreet sites were assessed for potential risk. Only one site was assessed as just above an acceptable range for cumulative risk. This site is located between Cumberland River and Wye River. It contains three high risk locations along the Cumberland River Walk (a popular existing trail) and another high-risk location along the proposed new trail alignment leading from the river walk up to Langdale Pyke lookout.

Specific risk mitigation measures have been recommended at the three potential high-risk sites and consequently the cumulative risk along entire trail has been reduced to an acceptable/tolerable level. The risk mitigation measures include:

- Micro-rerouting of the trail to avoid the risk.
- Hazard signage to warn walkers of the risk and encourage that they move through the site without lingering.
- Physical removal of loose rock from above the trail (moved to downslope side).

Many of the mitigation recommendations require pre and post construction input and assessment from a qualified geotechnical specialist to ensure the mitigation works are appropriately delivered.

The Geotechnical Investigations Report provides the full detail of the assessments and recommendations

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

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.

No significant impacts to road traffic expected as a result of the construction and operation of the project

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.

No significant impacts to amenity of residents due to increased dust or odours, noise or traffic levels or visual impacts expected due to the project. The project area is on remote public land with few neighbouring properties.

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.

No 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.

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.

No potential for displacement of residences or severance of residential access to community resources. The project area is all on public land and will not displace residents or restrict access to public land. The project is likely to improve access opportunities for a broader range of public land users.

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.

No non-residential land use activities likely to be displaced as a result of the project.

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.

The GORCT is unlikely to lead to any extensive or major effects on social or economic well-being, as the trail is likely to bring more tourism and increase access to the Great Ocean Road region for a broader range of users. Additionally, the GOR CT proposal has been subject to extensive community engagement, which has resulted in the alterations to reflect community concerns.

Is mitigation of potential social effects proposed?

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

Mitigation of potential social effects has been considered during the four formal phases of public consultation with the residents and communities within and adjoining the project area. The trail alignment (and associated infrastructure) has been designed/located in response to resident/community feedback.

GOR CT project design responses to resident/community consultation include aligning the trail north of the Moggs Creek township (in response to community concern) and locating the Big Hill campground (in response to local resident feedback).

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.

Eastern Maar Aboriginal Corporation (EMAC) are the relevant Registered Aboriginal Party (RAP) for the entire project area. EMAC are a delivery partner for the project with a funded position within EMAC and coordinating an Eastern Maar Citizens Working Group to provide input and direction to the project on Aboriginal Cultural Heritage and for self-determination of EMAC assertions.

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)

Preliminary investigation including a Cultural Heritage Desktop Assessment by Biosis revealed that further investigation and CHMP would be required. A.B. Heritage Pty. Ltd. were contracted to undertake archaeological investigations and prepare a CHMP. The CHMP is underway and is expected to be finalised in October 2024.

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 GOR CT study area is within an area of cultural heritage sensitivity and construction of a walking trail is considered a high impact activity under Regulation 7 of the *Aboriginal Heritage Regulations* 2018. Consequently, there is a requirement to prepare a mandatory cultural heritage management plan under Section 46 of the *Aboriginal Heritage* Act 2006.

Field assessments associated with a Cultural Heritage Management Plan have been completed and is expected to be finalised in October 2024, additionally:

- Previous archaeological investigations within the project area have indicated that landforms including lower and mid slopes, ridgelines, saddles and spurs in proximity to the river valleys and coastal areas are highly likely to contain Aboriginal cultural heritage.
- Subsurface testing carried out in CHMP 16168 revealed an artefact bearing layer between 100 - 200 millimetres. Artefact Scatters included silcrete, quartz and flint. Quartz and silcrete occur naturally within the region.
- A majority of Aboriginal places identified in the study area have been subject to disturbances associated with wind and water erosion, pedestrians and vehicles. Some areas, such as the Hitchcock Gully area, demonstrate high levels of disturbance caused by the timber industry.

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.

The GOR CT project area falls within Eastern Maar Country. A total of seventy-two (72) Aboriginal places comprising eighty-three (83) components are registered within the geographic region and a total of fifty-six (56) registered Aboriginal places consisting of sixty-four (64) individual place components have been registered within 50 metres of the study area.

Is mitigation of potential cultural heritage effects proposed?

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

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

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.

Some energy use will occur during the construction phase resulting from the use of vehicles and equipment.

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.

Excavated material will be reused onsite where appropriate or will be removed from site and disposed of appropriately. All waste will be managed under the conditions outlined in the project specific Construction Environmental Management Plan.

- ☒ Other. Describe briefly.

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

General waste from users of the campgrounds and trail heads. General waste will be managed in accordance with current council waste management processes and/or the proposed Operations Management Plan for GOR CT.

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.

Greenhouse gas emissions are estimated to remain less below 50,000 tonnes of CO2 equivalent per annum.

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

Numerous environmental avoidance and minimisation measures have been considered and applied to the siting of the project (i.e. trail and associated infrastructure), both in response to values/risks identified within specialist assessments and/or community and stakeholder feedback.

Some of the key siting measures that have been applied to the project to date to avoid areas of high ecological value include:

- Siting the entire trail to avoid any near passage to Southern-bent Wing-bat non-breeding caves and roost sites.

- Siting trails to minimise impacts on Hooded Plover through reducing sections on beaches.
- Siting all new sections of trail to avoid high quality remnants of Sand Heathland (EVC 6) and Heathy Woodland (EVC 48), as these EVCs contain a higher proportion of threatened flora and fauna habitat. This measure is particularly evident via trail realignments applied as part of siting sections of Ground-truthed Route 2 to occur on existing trails.
- Siting the trail to avoid any intersection with critical small mammal refuges and/or heavy Cinnamon Fungus infestation near Coal Mine Creek.
- Minimising trail development near estuaries and coastal wetlands.
- Elevate trails that intersect with critical small mammal habitat corridors.

Further micro-siting is also proposed to avoid ecological features and threatened flora populations, particularly with respect to the EPBC Act listed Wrinkled Button.
The table below provides a summary of trails removed/realigned from the concept and initial design versions of the trail network are summarised below.

Trail number	Trail design Version	Comments / rationale
4, 22_Alt 29_Alt	Concept Alignment 1	Removal of trails aligned along beach from the network to avoid impacts on breeding habitat for Hooded Plover.
1_Alt 3	Concept Alignment 2	Removal of trails from network to avoid areas of high quality EVC 48 - Heathy Woodland and EVC 6 - Sand Heathland. Trails have been realigned in GTR 2 to use existing walking trails and management vehicle tracks.
16_Alt, 20_Alt 21_Alt, 22_Alt 23_Alt, 24_	Concept Alignment 2	These trails have been removed from the trail network as a result of advice from DEECA, to avoid potential impacts on Southern Bent-wing Bat non-breeding and roosting caves.
5_Alt	Concept Alignment 2	Realignment of trail to avoid intersecting critical refuge habitat for small mammals and to avoid intersecting heavy infestation of Cinnamon fungus. The trail has been suitably realigned away from sand dunes which function as the critical refuge habitat.
2, 3, 4 5, 6	Ground-truthed Route 1	Removal of trails from formal network to avoid areas of high quality EVC 48 - Heathy Woodland. Section was realigned to use existing trails further north.

☒ Design: Please describe briefly

In addition to siting measures, numerous environmental avoidance and minimisation measures have been adopted during the project design phase, these have included:

- Detailed planning including feasibility studies, desktop constraints assessment, terrain modelling and an initial trail mark-out and later assessments that aimed to micro-site around potential areas of high ecological value. This process resulted in the reduction in the length of proposed trails, and the removal of some trails from the proposed alignment due to potential impacts to threatened flora and fauna species, and to sensitive EVCs.
- Aligning 41 kilometres of the trail network on exiting trails (i.e. formal walking trails and management vehicle tracks).
- Aligning 6.7 kilometres of the trail network on informal trails (i.e. unsanctioned walking trails that have been illegally constructed. Note that this trail type has been included in the vegetation loss calculations).
- Ensuring trail styles and construction methods only require the removal of understorey vegetation so the forest canopy and sub-canopy will remain intact.
- Designing trails to follow land contours and take advantage of flat spurs and ridges, where possible, minimising the need for major soil excavation.
- Using the design principle of elevating all waterway crossings and EVCs sensitive to hydrological changes (i.e: EVC 201 – Shrubby Wet Forest) to minimise disturbance of

aquatic habitats and to reduce ongoing point sources for sedimentation of local waterways.
- Committing to the principle of pre-construction micro-siting to achieve avoidance of key habitat features for threatened fauna, avoid significant flora species populations, minimise disturbance of wildlife habitat, minimise indirect impacts on significant trees and minimise impacts on waterways, other watercourses, springs and soaks.
- Committing to the development of a weed management plan to monitor and control weeds along the trail network.
- Committing to a strategy to monitor and control the spread of Cinnamon Fungus along the trail network.
- Engaging a professional arborist at the design stage to review existing conditions within the project area and recommend sensitive construction techniques that can be applied to ensure encroachment into tree protection zones and structural root zones does not lead to the long-term decline of forest trees.

☒ Environmental management: Please describe briefly.

Both a Construction Environmental Management Plan (CEMP) and Operations Management Plan (OMP) outlining the measures that will be applied to avoid, minimise and/or manage potentially adverse environmental effects during construction and/or operation will be prepared prior to any works actual occurring. A draft CEMP and OMP will be prepared in consultation with all relevant authorities and submitted to a/the responsible authority/s as part of a formal planning approvals package. The GOR CT project team expects that these drafts will require additional refinements in order to address any concerns/comments that referral/responsible authorities may have and again as part of any potential conditional approval and/or secondary consent requirements.

Specific project maps and plans will be developed and maintained during the construction process. These plans will provide plain-view instructional maps that will be developed to identify areas with particular requirements and/or environmental sensitivity, such as locations of habitat or species of conservation significance, or locations in proximity to sensitive noise, vibration or light receptors.

The CEMP will also include (but not be limited to):
- Cross-references to applicable conditions of approvals, permits or licences.
- Significant or sensitive areas and environmentally sensitive receivers.
- Environmental control measures, work areas and boundaries.
- Clear reference to relevant specific design drawings or plans applicable to that section (i.e. erosion and sediment control plans).
- Specific EPA requirements to be complied with include:
- EPA Publication 480, Environmental Guidelines for Major Construction Sites
- EPA Publication 1254 Noise Control Guidelines October 2008
- EPA Publication 275 Construction techniques for sediment pollution control
- Industrial Waste Resource Guidelines, as appropriate.
- Roles and responsibilities for implementation of the environmental management commitments will be identified in the CEMP.

Biosis Pty Ltd.'s Flora and Fauna Assessment (see Attachment #, p No.) includes numerous '*Key impact avoidance and minimisation strategies, and mitigation measures*', all of which will be adopted through either the CEMP/OMP documents themselves and/or any potential conditions of future permits, approvals or licences. Some key measure include (but are not limited to):
- Development of a weed control strategy that monitors weed invasion along the trail, at a minimum:
- Within key threatened species habitat (i.e. Wrinkled Buttons habitat, and small mammal refuge habitat at the Coalmine Creek intersect).
- Along tracks that extend through major weed infestations.
- Incorporates specific strategies to prevent the spread of Phytophthora cinnamomic.
- Construction of elevated boardwalks, when the trail transects either Ephemeral waterways and minor tributaries or Shrubby Wet Forest (EVC 201) to reduce impacts on hydrology and/or soil compaction, and threatened fauna associated with these habitats including Otway Burrowing Crayfish and Otway Black Snail.
- Adherence to a specific construction methodology (as outlined in Axiom Tree Management, 2022) to reduce impacts on trees through the implementation of tree protection measures.
- Microsite the trail:

- through recorded populations of Wrinkled Buttons to avoid direct impacts and
- Heathy Woodland (EVC 48) to reduce impacts on FFG Act listed flora.
- Otway Burrowing Crayfish habitat.
- At bridge abutments, where possible, to locate outside of TPZs of large trees and Southern Blue-gum.

- Protection of critical refuge habitat for small to medium sized ground-dwelling mammals.

☒ 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.

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.

Significant stakeholder and public consultation has occurred in multiple phases for this project.

As part of the 2019 feasibility study, a two-phase engagement program was implemented between May and August 2019 to obtain inputs to the study and trail design development. Face-to-face and online engagement options were provided in each phase to maximise participation and provide flexible and accessible ways for people to get involved. Nation Partners (refer to Appendix 23) report documents the approach taken and feedback received.

The engagement team spoke with over 100 people at community open house sessions, received almost 300 survey submissions and met with individual stakeholders and Reference Groups convened to provide advice to the study team.

In summary there were:

- 7 community open house sessions.
- 100+ face-to-face conversations with community members.
- 6 stakeholder meetings and 2 Community and Stakeholder Reference Group meetings.
- 287 surveys, 5 submissions and 28 map comments received.
- 1,600 visitors viewed the project webpage over 2,900 times.
- Around 3,500 individual comments made, reviewed and analysed.

During the Master Plan development in 2021 and 2022, feedback was sought from the community and stakeholders through four distinct phases of engagement. These are described in detail in the Great Ocean Road Coastal Trail Community Engagement Report, 2022 (refer to Appendix 24).

Community input was sought throughout the master planning process on a range of topics, including the walking trail's alignment, proposed suspension bridges, lookouts, camping sites and

other trail features, project design principles, achieving environmental excellence, trail accessibility, car parks and other options for getting to the trail. Community views informed key decisions and significantly influenced the project design.

In summary there were:

- 13 on-line drop-in sessions.
- 10 pop-up and drop-in sessions in local towns.
- 13 semi-structured interviews with community, environmental and business groups.
- 2 deliberative workshops.
- 10,950 page views from 4,200 unique visitors.
- Over 3,000 responses reviewed and analysed.

Overall there was significant community support for the project expressed through the community consultation processes.

Further public consultation for the project will occur during the detailed design phase of the campground, lookouts and suspension bridges in 2024.

Has a program for future consultation been developed?

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

Continued communication and engagement with community will be provided throughout the building of the project.

GORCAPA are currently proposing further community engagement regarding some of the trail elements as part of Engagement phase 5 between June - November 2024.

The projects current public facing communication and engagement platform can be found at Have Your Say.

Authorised person for proponent:

I, **Scott Turner**, **Director, Forest and Fire Operations, Barwon South West**, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature: 

Date: 06/09/2024

Person who prepared this referral:

I, **Stewart J Dekker**, **Great Ocean Road Coastal Trail, Planning and Approvals Coordinator**, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature 

Date 03/09/2024