Sunshine Motorway, South Facing Ramps West Coolum Road Interchange

Application Number: **03439** Commencement Date: **08/05/2026** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Sunshine Motorway, South Facing Ramps West Coolum Road Interchange

1.1.2 Project industry type *

Transport - Land

1.1.3 Project industry sub-type

Road

1.1.4 Estimated start date *

01/10/2027

1.1.4 Estimated end date *

31/10/2028

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The Department of Transport and Main Roads (TMR) is proposing to construct two new south-facing motorway ramps on the Sunshine Motorway, with an extent of approximately 220 m for each ramp, at West Coolum Road, Mount Coolum (the proposed action or 'the Project'). The Sunshine Motorway is currently a two-lane motorway providing north-south distribution along the coast, with exit points located at Maroochydore, Pacific Paradise and Coolum.

The scope of work for the Project includes:

- An exit ramp for motorists exiting the Sunshine Motorway on to West Coolum Road
- Widening to provide dedicated left and right turn lanes at the intersection with West Coolum Road
- An acceleration lane for southbound motorists entering the motorway
- Wayfinding signage to provide advance notice to motorists
- A raised traffic island on West Coolum Road east of the overpass to improve wayfinding and separate traffic
- Safety features including new lighting and a raised traffic median to separate opposing traffic on the motorway.

The Sunshine Motorway is a major high-speed coastal arterial link between Mooloolaba and Noosa with limited access that provides the only alternative to the Bruce Highway (national highway) and David Low Way (sub- arterial road) and is a key route for intra-regional Sunshine Coast trips.

The scale and pace of population growth and development in the Sunshine Coast region will have a significant impact on the future demand for travel and trips, to the extent that demand will significantly exceed the capacity of the Sunshine Motorway and key interchanges, particularly in the northern sections of the motorway.

The Sunshine Motorway section relevant to the Project functions as enabling economic infrastructure for the region by providing direct access to the Sunshine Coast Airport, linking the airport to the region's emerging city centre at Maroochydore and the nearby Regional Economic Cluster. It is also a vital element of Southeast Queensland's freight network, functioning as a secondary freight route and an alternate route to the Bruce Highway during a natural disaster or after a road incident.

The Project is part of an election commitment made by the Queensland Government.

The key objectives of the Project are to:

- Improve safety and increases traffic flow
- Reduce interchange queuing at existing interchanges
- Increase capacity and reduce peak hour congestion
- Improve network efficiency
- Improve travel time reliability
- Contribute to local economy and regional growth
- Provide better active transport facilities.

The Project works will include the following general works:

- Relocation of public utility plant
- Site establishment, installation of erosion and sediment control and construction of temporary work areas, laydowns, and site compounds using existing disturbed areas
- Storage of hazardous materials within previously disturbed areas in suitable contained areas
- Removal of vegetation and landscaping
- Topsoil stripping and stockpiling
- Treatment (or preloading) of soft soils, contaminated land and acid sulfate soils (if required) during earthworks
- Bulk earth works including embankment construction
- Drainage installation

- Pavement works, including subgrade construction and asphalt placement
- Installation of new signs, fencing (including permanent fauna fencing)
- Landscaping planting and establishment
- Site de-establishment and finalisation of construction defects
- Rehabilitation of temporary disturbance areas following completion, including any site compounds, laydowns, or storage areas

Operational works are not included in the referral. Operational works are described in **Att A, Section 2.6, pp 7**.

Other works that may be undertaken as part of a minor works contract prior to the main construction contract are described in **Att A, Section 2.4, pp 6.** The works in the minor works contract are excluded from this referral. A self-assessment of potential impacts to Matters of National Environmental Significance (MNES) will be undertaken for the minor works.

The project area is 16.04 ha, consisting of a project footprint of 8.97 ha. Proposed activities that may directly or indirectly impact on the environment include vegetation clearing, earthworks, topsoil handling and stockpiling, use and storage of hazardous materials, and general construction activities that may cause increased dust, light, noise and vibration. Mitigation measures will be identified during Detailed Design which will be addressed through the design (e.g. minimisation of clearing) and into the construction contract. Fauna exclusion fencing will be implemented to reduce vehicle strike. Offsets will also be provided as relevant to the Project approvals, where conditioned.

Further information is provided in **Att A, Section 2, pp 5**.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

No

1.2.4 Related referral(s)

—

1.2.5 Provide information about the staged development (or relevant larger project).

The Project adjoins a proposed Sunshine Coast Council project immediately to the east along West Coolum Road. Council is proposing road infrastructure works that will connect to, and align with, TMR's Sunshine Motorway Upgrade at the West Coolum Road interchange and includes extending Suncoast Beach Drive and South Coolum Road to provide direct access to West Coolum Road and the new motorway ramps. Both roads to be extended are located within local council road reserve and the project area extends north and south of West Coolum Road incorporating adjacent residential and vegetated land parcels. It is noted that Council do not currently have design and construction funding available and the current reference design for TMR's project ties into the existing alignment of West Coolum Road to the east of the overpass.

Whilst there is uncertainty over Council's project alignment and how the two projects will tie in, TMR have included the immediate area to the east of West Coolum Road overpass in the EPBC survey extents in order to capture any future design change impacts. Council's proposed road upgrade may include:

- Intersection upgrade to roundabout configuration
- Road widening and alignment improvements
- Provision of turning lanes and improved lane delineation
- Clear zone widening and vegetation clearing
- Pavement, drainage and earthworks upgrades
- Safety barrier installation.

As per Section 74A of the EPBC Act, the Council project will be delivered by Council under a separate funding arrangement and therefore the two projects cannot be considered 'related actions'.

The state government is also undertaking planning to duplicate a 10km section of the Sunshine Motorway David Low Way at Pacific Paradise and Yandina-Coolum Road at Coolum Beach. However, the duplication project is currently at Preliminary Evaluation phase and therefore has not gone through Business Case phase to select a preferred design option or confirm cost. There is also no committed funding to progress detailed design or construction. A separate EPBC Act Assessment will be conducted as part of the planning for the Sunshine Motorway Duplication.

The proposed south-facing ramps Project is able to operate independently of the motorway duplication project and is being delivered under separate funding arrangements and separate construction contracts and therefore does not form part of a larger action.

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act is the Australian Government's central piece of environmental legislation which provides a framework for the assessment of MNES. Where a person proposes to take an action that is likely to have a significant impact on MNES, the action must be referred to the minister administering the EPBC Act for a decision on whether assessment and approval is required under the EPBC Act.

Potentially occurring MNES (threatened ecological communities and species and migratory bird species) have been identified within the project area and/or broader area through desktop assessments of public databases and field ecological surveys. Significant impact assessments (SIAs) have been undertaken for each MNES that was assessed as known to occur, likely to occur, or may potentially occur in the project area, in accordance with the criteria outlined in the EPBC Act Significant Impact Guidelines 1.1 – Matters of National Environment Significance (DEWHA, 2013) and the EPBC Act Policy Statement 3.21 – Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species (DoEE, 2017). The SIAs identified the Project is likely to have a significant impact on one threatened ecological community, the Coastal swamp sclerophyll forest of New South Wales and South-east Queensland. The Project is being referred under the EPBC Act.

Native Title Act 1993

The *Native Title Act 1993* provides for recognition of native title, establishes a mechanism for determining claims to native title and sets standards for future dealings affecting native title. Native title is the recognition that Indigenous people may continue to hold rights over land and waters through the practice of their traditional laws and customs.

Under the NT Act, native title is likely to be extinguished over freehold land parcels that were granted on or before 23 December 1996, known as a 'previous exclusive possession act', and over road reserves where the road existed on or before 23 December 1996. As the project area is wholly made up of both existing road reserve and freehold tenured land, no native title assessments have been completed.

Aboriginal Cultural Heritage Act 2003

A Cultural Heritage Risk Assessment has been undertaken in accordance with the *Aboriginal Cultural Heritage Act 2003,* which identified high risk areas within 100 m of the project area for the potential to unearth items of cultural heritage significance. TMR has begun consultation with the relevant Aboriginal party, the Kabi Kabi People, and will continue consultation during design development.

Biosecurity Act 2014

The *Biosecurity Act 2014* (Biosecurity Act) establishes a framework to minimise biosecurity risks within Queensland and respond to impacts on biosecurity in a timely and effective manner.

The Biosecurity Act establishes a 'general biosecurity obligation' that requires all persons to take all reasonable and practical steps to prevent or minimise biosecurity risks.

During field surveys for the Project, several invasive flora species were recorded within the project area, including the following species listed as Category 3 restricted matter under the Biosecurity Act:

- Broad-leaf pepper tree (*Schinus terebinthifolius*)
- Lantana (*Lantana camara*) - WoNs
- Singapore daisy (*Sphagneticola trilobata*) - WoNs
- Camphor laurel (*Cinnamomum camphora*)
- Asparagus fern (*Asparagus scandens*)
- Groundsel (*Baccharis halimifolia*)

Pest fauna recorded during field surveys within the project area included the following species listed as restricted matter under the Biosecurity Act:

- Mosquito fish
- Red fox (*Vulpes vulpes*)

The project area is not located within a Fire Ant Biosecurity Zone or any other relevant biosecurity zones.

Coastal Protection and Management Act 1995

The south-western extent of the project area intersects with areas mapped within the Coastal Management District (CMD), declared under the *Coastal Protection and Management Act 1995.* A development approval for works that are tidal works or works within a CMD is required under the *Coastal Protection and Management Act 1995*, unless the works are considered accepted development under the *Planning Regulation 2017*. To be considered accepted development, the Project must meet the requirements of the *Code for accepted development for tidal works or work completely or partly in a coastal management district, August 2017*. The requirement for a development approval for tidal works or works within a CMD will be determined during the detailed design phase of the Project.

Environmental Protection Act 1994

Under the *Environmental Protection Act 1994* (EP Act) all persons have a general environmental duty not to carry out an activity that may cause harm without taking measures to prevent or minimise the harm. TMR is and will be subject to the general environmental duty throughout all phases of the Project.

The project area does not intersect any land parcels that are listed on the Environmental Management Register or Contaminated Land Register, which are registers of areas of potential contamination established under the EP Act.

Fisheries Act 1994

The *Fisheries Act 1994* (Fisheries Act) establishes the framework for the management, use, development and protection of Queensland's fisheries resources and fish habitat, including recognition of the value that marine plants play in supporting fish populations and aquatic health.

The project area does not intersect any waterways under the Fisheries Queensland spatial layer, Waterways for waterway barrier works and does not support marine plant communities.

Planning Act 2016 and *Planning Regulation 2017*

Development approvals triggered by the *Coastal Protection and Management Act 1995,* are managed under the *Planning Act 2016* and *Planning Regulation 2017.*

Under the Planning Regulation, clearing of koala habitat areas for the development of transport infrastructure carried out by the State of Queensland is exempt development. As such, a development approval for clearing koala habitat is not required for the Project.

Native Title (Queensland) Act 1993

The administration and management of land and land dealings in Queensland is generally the responsibility of the Queensland Government. The Queensland *Native Title Act 1993* was enacted to ensure that Queensland law is consistent with the Commonwealth NT Act with respect to the application and consideration of native title rights and interests.

All land dealings within the project area have been assessed during the business case in accordance with the Native Title Work Procedures to ensure that native title rights and interests are appropriately considered and addressed.

Nature Conservation Act 1992

The proposed action will tamper with animal breeding places as defined under the *Nature Conservation Act 1992* subordinate legislation the *Nature Conservation (Animals) Regulation 2020.* TMR has an approved state-wide SMP for tampering with animal breeding places (low risk of impacts). A high-risk SMP will be

required for the Project for tampering with breeding places of animals listed as colonial breeders, extinct in the wild, critically endangered, endangered, vulnerable, near threatened or special least concern.

Nature Conservation (Koala) Conservation Plan 2017

Sequential clearing practices are required for the Project in accordance with the *Nature Conservation (Koala) Conservation Plan 2017* to prevent the injury or death of koalas when clearing koala habitat. Sequential clearing includes clearing koala habitat trees in a way that allows koalas to move out of the clearing site without human intervention, maintaining appropriate habitat links to allow koalas to move out of the site, avoiding clearing any habitat tree in which a koala is present or habitat trees with crowns that overlap trees in which koalas are present.

State Government Supported Infrastructure - Koala Conservation Policy 2023

This policy outlines how Queensland public sector entities will consider koala conservation outcomes in the planning and delivery of Government Supported Infrastructure in South East Queensland. TMR has designed the Project to avoid fragmenting koala habitat and restricting koala movements as much as possible.

Waste Reduction and Recycling Act 2011

The proposed action will be subject to payment of a waste disposal levy under this Act for the disposal of general and regulated waste.

TMR Process

The Project has undertaken an environmental assessment in accordance with TMR's Environmental Process Manual, which provides governance for environmental assessment and management of transport infrastructure projects by TMR. The process supports the Department's general environmental duty to the environment under the EP Act, managing the performance of its functions and operations in accordance with the Department's corporate governance framework. A Review of Environmental Factors is being developed as part of the Reference Design update which identifies environmental and cultural heritage impacts. An Environmental Management Plan (Planning) is also being developed which identifies environmental and cultural heritage impacts and includes recommended mitigation measures.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

TMR undertook community consultation from 30 January to 26 February 2023 regarding the broader Sunshine Motorway duplication project which includes a 10-kilometre section of the Sunshine Motorway between David Low Way, Pacific Paradise and Yandina-Coolum Road, Coolum Beach. Also included within this broader project was the South Facing Ramps. TMR collected feedback through an online survey, via email and telephone calls, meetings with property owners and during a community drop-in session held within the extent of the Sunshine Motorway duplication. The online survey asked respondents to indicate their level of support for and comment on features of the preferred option, which was segmented into three sections for the purpose of consultation.

The following key feedback was received regarding the Project:

- Strong support for the possible West Coolum Road south facing ramps with requests this feature be included in the program to provide an alternative access to the motorway. Respondents considered this a key feature to alleviate congestion at Yandina-Coolum Road and South Coolum Road
- Feedback regarding the West Coolum Road south-facing ramps included interest in potential increased local traffic volume and noise as well as some requests for including north-facing ramps
- Environmental management to limit vegetation clearing, inclusion of fauna fencing and crossings and consideration for significant conservation areas and the Blue Heart floodplain.

Public consultation requesting feedback on the Project began formally on 2 April 2026 with a Ministerial media announcement supported by project webpage updates, a 'have your say' dedicated consultation page, followed by MP and key stakeholder direct notifications (including Blueheart partnership, directly impacted landowners, local community and business groups), a project database update via EDM to more than 540 registered contacts, and a social media (geo-targeted) paid post on Facebook. Feedback is being received via the 'have your say' online form and direct emails to TMR. Consultation closes on 15 May 2026 with feedback informing the design phase of the Project. Following this, a consultation summary will be published on the project webpage Sunshine Motorway Mooloolaba Peregian West Coolum Road upgrade interchange | Department of Transport and Main Roads.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint.

Alternatively, email us at privacy@dcceew.gov.au.

☑ **Confirm that you have read and understand this Privacy Notice ***

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	39008488373
Organisation name	GHD PTY LTD
Organisation address	2000 NSW

Referring party details

Name	Shelley Chadwick
Job title	Technical Director - Environmental Science
Phone	54138154
Email	shelley.chadwick@ghd.com
Address	3 South Sea Islander Way, Maroochydore, QLD 4558

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	39407690291
Organisation name	Department of Transport and Main Roads
Organisation address	4000 QLD

Person proposing to take the action details

Name	Lachlan McKenzie
Job title	Principal Environmental Officer
Phone	(07) 4931 1571
Email	lachlan.h.mckenzie@tmr.qld.gov.au
Address	50 Wises Road, Maroochydore

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

TMR, as the Project proponent, is highly experienced in the planning, delivery and operation of major transport infrastructure projects. TMR's core role is the planning, building and maintaining of Queensland's road, rail, freight, and maritime infrastructure.

TMR North Coast Region has an excellent track record in co-ordinating environmental assessments and delivery of environmentally sensitive transport solutions, evidenced through recent major infrastructure on the Beerburrum to Nambour Rail Upgrade and the Bruce Highway: Maroochydore Road Interchange. Further information about TMR's achievements, performance and outlook is available at www.tmr.qld.gov.au.

TMR has not been subject to proceedings under the EPBC Act. Further TMR has not been subject to any proceeding under State law.

TMR seeks to minimise the impact of the state-controlled road network on the natural environment:

- TMR’s Environmental Process Manual sets out the processes for assessing and managing the environmental impacts of transport infrastructure projects. During the planning phase of all its projects, TMR completes an environmental assessment to understand the potential risks to environmental and cultural values, to inform the Project design and ensure compliance with TMR’s obligations under state and federal legislation
- TMR adopt a best practice, cost-effective approach to the management of environmental and heritage impacts by embracing the hierarchy of 'avoid, minimise and mitigate; in a financially feasible manner
- TMR have an Environmental Management System consistent with the principles of AS/NZS ISO 14001:2016.
- Further information about TMR's environmental management is available at **Environmental Management** (Department of Transport and Main Roads) (tmr.qld.gov.au).

TMR has previously referred a variety of actions from across Queensland. Some examples include:

- 2026/10481 Caloundra Road, nicklin Way, Pelican Boulevard Intersection Upgrade
- 2026/10420 Kin Kin Road, Williams Road to Western Branch Road, Strengthening and Pavement Widening Project
- 2025/10400 Caloundra Road, Kawana Way Link Road and Bells Creek Arterial Road Intersection Upgrade
- 2025/10385 Kin Kin Road, Sallwood Court to Turnbull Road, Strengthening and Pavement Widening Project
- 2024/09800 Gateway Motorway (Bracken Ridge to Pine River) Upgrade
- 2024/09886 Bruce Highway (Gateway Motorway to Dohles Rocks Road) Upgrade
- 2022/9439 Logan and GoldCoast Faster Rail
- 2022/9348 Loganlea Station Relocation and Park 'n' Ride Expansion
- 2022/9277 Intersection Upgrades (Sunshine Motorway/Sugar Rd and Mooloolaba Rd)
- 2022/9181 Rockhampton – Yeppoon Road Upgrade
- 2021/9120 Six Mile Creek Bridge Replacement
- 2021/9116 Kin Kin Road
- 2021/9003 Townsville eastern access rail corridor
- 2020/8803 Beerburrum to Nambour Rail Upgrade
- 2018/8355 Bruce Highway Intersection Upgrades, Sunshine Coast.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation’s environmental policy and planning framework

TMR operates under the guiding principles of its **Environmental Sustainability Policy (2021)** and Environmental Management System. Under the policy TMR is committed to:

- Managing our environmental interactions and incorporating sustainable and innovative solutions to minimise our environmental footprint as an integral part of our business activities
- Continuous improvement in environmentally sustainable practices, and partnering with our stakeholders to ensure a resilient and adaptable transport system
- Meeting the needs of the current generation while minimising environmental impacts on future generations
- Contributing to the sustainability of the natural environment, while delivering a single integrated transport network accessible to everyone.

TMR undertakes works in accordance with the Department's Environmental Process Manual, available to view on the TMR website at **https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Environmental-processes-manual**

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN	39407690291
Organisation name	Department of Transport and Main Roads
Organisation address	4000 QLD

Proposed designated proponent details

Name	Lachlan McKenzie
Job title	Principal Environmental Officer
Phone	(07) 4931 1571
Email	lachlan.h.mckenzie@tmr.qld.gov.au
Address	50 Wises Road, Maroochydore

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	39008488373
Organisation name	GHD PTY LTD
Organisation address	2000 NSW
Representative's name	Shelley Chadwick
Representative's job title	Technical Director - Environmental Science
Phone	54138154
Email	shelley.chadwick@ghd.com
Address	3 South Sea Islander Way, Maroochydore, QLD 4558

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	39407690291
Organisation name	Department of Transport and Main Roads
Organisation address	4000 QLD
Representative's name	Lachlan McKenzie
Representative's job title	Principal Environmental Officer
Phone	(07) 4931 1571
Email	lachlan.h.mckenzie@tmr.qld.gov.au
Address	50 Wises Road, Maroochydore

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint

Project Area: 16.08 Ha **Disturbance Footprint:** 9.00 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Sunshine Motorway and West Coolum Road, QLD, 4573

2.2.2 Where is the primary jurisdiction of the proposed action? *

Queensland

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The Project is primarily located within an existing state-controlled road corridor of the Sunshine Motorway. Other land tenure within the project area includes:

- Freehold
- Sunshine Coast Council local road reserve for West Coolum Road.

Refer to **Att A, Section 2.2.2, pp 6** for further information on land tenure, land use and zoning.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The Project is located within the south-east Queensland region within the Sunshine Coast Council local government area on the boundary of the Coolum Beach and Marcoola suburbs. The Mount Coolum township is approximately 1 km south-east of the project area and the Maroochydore central business district is approximately 13 km to the south.

Access to the project area is via the existing West Coolum Road and Sunshine Motorway, with construction traffic expected to utilise established motorway and local road connections to minimise disruption to surrounding land uses and traffic operations. Temporary exclusion fencing will be installed (where possible) during construction around cleared areas in locations of high ecological sensitivity to prevent local fauna from entering construction areas. Fencing will also be used to restrict access to sensitive environmental areas from the Sunshine Motorway and West Coolum Road.

The project area is in a moderately disturbed environment consistent with that of a motorway; however, there are surrounding areas of high value natural environments adjacent to the project area, including the Maroochy River Wetland Area, which consists of dense vegetation on both sides of the Sunshine Motorway. The surrounding wetland area is in good condition and is characterised by low-lying coastal swamps that support remnant vegetation communities and habitats. The broader local area is a peri-urban setting characterised by existing transport infrastructure, cleared road corridors and surrounding rural-residential and agricultural land use.

The existing environment is described in further detail in **Att A, Section 5, pp 24.**

3.1.2 Describe any existing or proposed uses for the project area.

The dominant land use within the project area is a road reserve for the Sunshine Motorway, which is a state-controlled road. The Sunshine Motorway is a major high-speed coastal arterial link between Mooloolaba and Noosa, providing the only alternative to the Bruce Highway (national highway) and David Low Way (sub-arterial road) and is a key route for intra-regional Sunshine Coast trips.

1. The current land use within the project footprint is a State-controlled road reserve for the Sunshine Motorway. Areas surrounding the project area include the following zones as mapped on the **Sunshine Coast Planning Scheme 2014:**

- Environmental management and conservation
- Rural
- Low density residential
- Community facilities.

There will be no changes to zoning for the proposed action.

The proposed use for the project footprint is as a state-controlled road and is consistent with the current use.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

The project area is a moderately disturbed environment; however, there are surrounding areas of high value natural environments characterised by low-lying coastal swamps that support remnant vegetation communities and habitats. These environments are located outside the extent of the project footprint, but within proximity to the project area.

Outstanding natural features in proximity to the project area include:

- Maroochy River Wetland Area, which is intersected by the Project
- Mount Coolum National Park, located approximately 485 m north-east of the northern extent of the project area
- Coolum Creek and the Coolum Creek Conservation Park, approximately 790 m west of the project area
- Maroochy River, approximately 470 m south of the southern extent of the project area.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The project area is relatively flat and low-lying with elevations ranging from 0 m Australian Height Datum (AHD) to 20 m AHD. The southern extent of the project area is predominantly located on the 2-3 m AHD contour with the exception of a large existing cut batter on the western side which reaches elevations of 20 m AHD. In the central section of the project area, a second existing cut batter is present which reaches elevations of 10 m AHD again on the eastern side of the motorway, with the eastern section being located on the 4-5 m AHD contour. The northern extent of the project area is located on the 1-2 m AHD contour with existing abutments associated with the existing West Coolum Road bridge being located between 4 – 8 m AHD.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

TMR has undertaken comprehensive ecological investigations and surveys (desktop and field survey) for the Project. These include:

- Baseline flora and fauna surveys in February 2026
- Targeted Threatened Ecological Communities assessments (TECs) in March 2026
- Targeted flora and fauna surveys, including nocturnal surveys in March 2026
- Remote sensor camera trapping for 5 weeks during March – April 2026.

Further details of the scope and methods of these surveys are detailed in **Att A, Section 4, pp 16.**

No conservation-significant flora species were identified within the project area during field ecology surveys however, four were categorised as 'potentially occurring' due to low-moderate habitat values being present within the project area and historical records within the broader region. These include:

- Whipstick wattle (*Acacia attenuata*) – vulnerable
- Hairy-joint grass (*Arthraxon hispidus*) – vulnerable
- Swamp orchid (*Phaius australis*) – endangered
- Native guava (*Rhodomyrtus psidioides*) – critically endangered

1. Further details are provided in **Att A, Sections 7.2.6 (whipstick wattle) pp 99, 7.2.7 (hairy-joint grass) pp 107, 7.2.8 (swamp orchid) pp 114, 7.2.9 (native guava) pp 121.**

The likelihood of occurrence assessment identified several fauna species as either 'likely to occur' or 'potentially occurring'. No threatened fauna species were categorised as 'known to occur' due to a lack of good quality habitat.

- Likely to occur:
    - Grey-headed flying-fox (Pteropus poliocephalus) – vulnerable
    - White-throated needletail (*Hirundapus caudacutus*) – vulnerable, migratory
    - Fork-tailed swift (*Apus pacificus*) - migratory
- Potential to occur:
    - Koala (*Phascolarctos cinereus*) - endangered
    - Wallum sedgefrog (*Litoria olongburensis*) – vulnerable
    - Sand yabby (*Cherax robustus*) – vulnerable
    - Oriental cuckoo (*Cuculus optatus*) – migratory

No other conservation significant fauna species were recorded in the project area; however, potentially suitable habitat to support conservation significant species was observed in the project area.

The Project is expected to result in the loss of 3.94 ha of potential koala dispersal habitat, which largely consists of koala ancillary species (*Melaleuca quinquenervia*) which is considered shelter habitat, or has scattered important koala trees (*Eucalyptus tereticornis or E. robustus*) which do not make up a substantial proportion of the community to be considered necessary to support foraging habitat. No koalas or evidence of koalas (scat or scratches) were recorded during the field surveys.

Habitat for the wallum sedgefrog and sand yabby was limited to the southern extent of the Project area and restricted to 0.03 ha. Habitat for these two species was confined landzone 2 (sand plains) due to species specific habitat requirements including both sandy substrate and acidic environments. Due to the present of mosquitofish and eastern dwarf sedgefrog, as well as historic vegetation clearing, current impacts from the existing Sunshine Motorway, and lack of connectivity to high quality breeding habitat, it is considered that habitat within the project area should not be considered critical to the survival of the species on the overarching principal that this habitat would not be necessary for any activity, nor would it be essential for maintaining genetic function or long-term maintenance of the species.

The white-throated needletail or fork-tailed swift was not detected during field survey. Based on the species potential to occur above terrestrial habitats, the species is considered likely to occur based on nearby historical records and the presence of foraging habitat above all vegetated areas of the project area. While

the white-throated needletail and fork-tailed swift are considered likely to occur, no suitable roosting habitat is present, and the species has the capacity to forage above the entirety of the Project area due to the species broad range of suitable foraging habitat.

The oriental cuckoo was not detected during field surveys. However, the species is considered to have the capacity to periodically utilise the project area whilst migrating and therefore all remnant and high-valued regrowth vegetation within the project area is mapped as potential habitat even if it is only likely to be used for short periods of time during migration.

Further details are provided in **Att A, Sections 7.2.1 (koala) pp 59, 7.2.2 (grey-headed flying-fox) pp 71, 7.2.3 (wallum sedgefrog) pp 78, 7.2.4 (sand yabby) pp 87, 7.2.5 (white-throated needletail) pp 94, and 7.3 (Listed migratory species) pp 128.**

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

The project area is within a moderately disturbed environment where vegetation has been cleared for existing road networks and rural residential properties. The surrounding environment is characterised by low-lying coastal plains that support remnant vegetation communities and habitats.

Field surveys undertaken for the Project ground-truthed the following Regional Ecosystems (REs) as mapped under the Queensland *Vegetation Management Act 1999:*

- 12.2.7 - *Melaleuca quinquenervia* or rarely M. dealbata open forest on sand plains
- 12.3.5 - *Melaleuca quinquenervia* open forest on coastal alluvium
- 12.3.6 - *Melaleuca quinquenervia* +/- *Eucalyptus tereticornis*, *Lophostemon suaveolens*, *Corymbia intermedia* open forest on coastal alluvial plains
- 12.9-10.1 - Tall open forest often with *Eucalyptus resinifera*, *E. grandis*, *E. robusta* and *Corymbia intermedia* on sedimentary rocks, usually coastal

REs are used in Queensland to provide information on habitat and the presence of TECs. Corresponding REs are generally listed in the conservation advice for TECs. The following TEC was confirmed present in the project area:

- Coastal swamp sclerophyll forest of New South Wales and South East Queensland

Refer to **Att A, Section 7.1, pp 42** for further information on TEC condition and locations.

Dominant soil types in the project area include Hydrosols and Dermosols. Hydrosols are soils with poor drainage that remain saturated for extended periods of time, occur in low lying areas and are usually non-dispersive (State of Queensland, 2022). Whereas, Dermosols typically cover the higher rainfall coastal and sub-coastal regions and are considered stable in terms of erosivity (State of Queensland, 2022).

3.3 Heritage

3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

A search of the Australian Heritage Database indicates the south-western extent of the project area is located within the Noosa – Maroochy Wallum Area, which is listed on the Register of National Estate (RNE). The RNE is listed on the Australia Heritage Database as a non-statutory place which is significant for its ecological and natural values. The existence of a place in the RNE does not in itself create a requirement to protect the place under Commonwealth law. RNE places can be protected under the EPBC Act if they are also included in another Commonwealth statutory heritage list or are owned or leased by the Commonwealth. The Noosa – Maroochy Wallum Area is not located on another statutory Commonwealth heritage list.

A search of the Queensland Heritage Register indicates there are no state heritage listings within the project area.

There are no heritage places listed on the Sunshine Coast Council's local heritage register within or in proximity to the project area.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

The project area is located on Kabi Kabi Country and the local Aboriginal Party is the Kabi Kabi First Nation Traditional Owners. A search of the Queensland Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism Cultural Heritage Database and Register did not return any records of Indigenous cultural heritage significance within the project area.

A cultural heritage risk assessment (CHRA) was undertaken for the Project, which identified areas of high risk within 100 m of the project area for the potential to unearth items of cutlural heritage significance due to the extent of remnant, mature vegetation.

The southern extent of the project area adjoins the Sunshine Coast Blue Heart Area. While not designated under legislation generally, Kabi Kabi First Nation representatives have expressed a strong desire to protect and conserve environmental values within the Blue Heart Area to continue traditional cultural practices.

Parts of the project area which have previously been cleared for road formation present a low risk to aboriginal cultural heritage.

Consultation with the Kabi Kabi Peoples Aboriginal Corporation has commenced in April 2026, with a Request for Engagement sent to the Kabi Kabi Peoples Aboriginal Corporation, including the Project's CHRA, a Work Activity Notification, and a Request for Engagement. The TMR Project team will continue to work with Kabi Kabi representatives to undertake initial consultation and Project familiarisation, an initial site walkover as well as any further investigations (such as test pits) pending recommendations from the Kabi Kabi Peoples Aboriginal Corporation. This consultation will be led by TMR. Results from the investigations will feed into management recommendations, design where relevant, and contract specifications and agreements (such as a Cultural Heritage Field or Management Agreement). Engagement will continue through development and will help inform management requirements and future agreements.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

The Project is within the Coolum and Yandina sub-catchment which is a major sub-catchment of the Maroochy River catchment. No mapped watercourse or waterways intersect the project area. Surface water from the east is transferred via an existing culvert underneath the motorway in the north to the west towards Coolum Creek. Queensland Globe maps this adjacent bushland vegetation as a ‘flat’ that is subject to intermittant inundation. Once inundated, this flat drains south toward a major tidal drain (Coolum drain) to the south which leads directly to the Maroochy River just south of the confluence with Coolum Creek.

A hydraulic assessment was undertaken as part of the planning design phase for the broader Sunshine Motorway Pacific Paradise to Coolum motorway duplication upgrade project (TMR, 2022). The purpose of this assessment was to develop an understanding of the existing flood conditions and an appropriate modelling approach for the various designs. A preliminary design assessment was also undertaken to understand the risks associated with flooding.

Regional flooding from the overall Maroochy River (located to the south of the project area) was the primary focus with data being sourced from Sunshine Coast Council to form the basis for the flood modelling. To assess the existing flood regime and flood immunity of the project area using simulations of existing infrastructure and landscape features against varying intensities of rainfall expressed as Annual Exceedance Probabilty (AEP). These AEP hydraulic simulations model potential flood heights during these rainfall events, identifying inundation heights and any changes to previous inundation ranges (TMR, 2022).

Within the project area, two existing culverts are present, one within the northern extent and one within the southern extent. Flow from both culverts move in a westerly direction ultimately towards Coolum Creek.

Under the current modelling the following key points of interest are identified:

- The flood immunity of the existing Sunshine Motorway is 10% AEP.
- The hydraulic analysis and modelling included the ultimate upgrade condition to the project area and therefore included the adjacent Sunshine Coast Council project to consider the entire upgrade for flooding and afflux.
- Velocities are very low across the project area, with regional flooding (from the Maroochy River and Coolum Creek) governing peak flood levels. Flooding is largely driven by floodplain storage indictaing that water moving through the project area is slow moving, therefore reducing the potential for erosion and scour issues.
- Flood modelling has indicated that the interchange layout at West Coolum Road within the project area is a primary location where key water conveyances must be maintained to ensure activation of the floodplain storage to the east of the project area is maintained.
- Overall afflux is considered negligible, however there are some impacts observed outside the road reserve for smaller, more frequent events.
- Minor impacts (10-20 mm increase) are observed near the South Coolum Road interchange for the 5% AEP and smaller events.
- Modelling results are not very sensitive to the inclusion of the planned council road improvements for Sunshine Coast Council’s South Coolum Road. Analysis indicates that if upgrade of South Coolum Road is not constructed, water levels to the south east of the interchange would be slightly higher across the range of modelled events. This area is not sensitive to afflux with no habitable dwellings.

Further hydraulic analysis, modelling and assessment will be completed as part of the Detailed Design of the project to review the most up to date information on the detailed drainage pathways.

The project area is surrounded by low-lying coastal floodplains and therefore adjacent areas on either side of the existing Sunshine Motorway are mapped as Terrrestrial Groundwater Dependent Ecosystems which are categorised as near-permanent low-lying coastal swamps. No existing groundwater wells are located within close proximity of the project area.

To date, a single one-off surface water quality monitoring event has been undertaken on 17 April 2026. Water quality monitoring was undertaken at six discrete locations across the Project area, with three replicates taken per site.

Water quality was utilised as a metric to assist in assessing suitability for low pH (acid) dependent species (i.e., wallum sedgefrog, sand yabby) within the project area and therefore was collected from RE's which supported wallum habitat. As the Project area is a floodplain, water in the Project area has no flow and sits stagnent before evaporating, soaking into the groundwater or slowly moving overland south towards towards the Coolum drain or west towards Coolum Creek. The exception to this is the window of time after a large rainfall event where water flows off adjacent high points (ie., Mount Coolum). Depth of water varies seasonally with rainfall, observations during February 2026 found the majority of the Project area to be dry, with heavy rainfall in March 2026 inundating the area with water to depths of over 1m, before drying out during water quality measurements in April 2026. The average pH across the project area is 5, making the site largely acidic.

Refer to **Att A, Section 5.3, p. 25** for further water quality data.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no World Heritage areas within or in proximity to the project area, therefore the action is unlikely to have a direct and/or indirect impact.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no National Heritage places within or in proximity to the project area, therefore the action is unlikely to have a direct and/or indirect impact.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no Ramsar wetlands within or in proximity to the project area, therefore the action is unlikely to have a direct and/or indirect impact.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
Yes	Yes	Acacia attenuata	
No	No	Acronychia littoralis	Scented Acronychia
No	No	Allocasuarina emuina	Emu Mountain Sheoak, Mt Emu She-oak
No	No	Allocasuarina thalassoscopica	
No	No	Anthochaera phrygia	Regent Honeyeater
No	No	Argynnis hyperbius inconstans	Australian Fritillary
Yes	Yes	Arthraxon hispidus	Hairy-joint Grass
No	No	Baloghia marmorata	Marbled Balogia, Jointed Baloghia
No	No	Bosistoa transversa	Three-leaved Bosistoa, Yellow Satinheart
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris canutus	Red Knot, Knot
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo
No	No	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat
No	No	Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
Yes	Yes	Cherax robustus	Sand Yabby
No	No	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)
No	No	Cryptocarya foetida	Stinking Cryptocarya, Stinking Laurel
No	No	Cryptostylis hunteriana	Leafless Tongue-orchid
No	No	Cyclopsitta diophthalma coxeni	Coxen's Fig-Parrot

Direct impact	Indirect impact	Species	Common name
No	No	Dasyurus hallucatus	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)
No	No	Delma torquata	Adorned Delma, Collared Delma
No	No	Erythrotriorchis radiatus	Red Goshawk
No	No	Eucalyptus conglomerata	Swamp Stringybark
No	No	Falco hypoleucos	Grey Falcon
No	No	Furina dunmalli	Dunmall's Snake
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	Yes	Hirundapus caudacutus	White-throated Needletail
No	No	Lathamus discolor	Swift Parrot
No	No	Limnodromus semipalmatus	Asian Dowitcher
No	No	Limosa lapponica baueri	Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit
Yes	Yes	Litoria olongburensis	Wallum Sedge Frog
No	No	Macadamia integrifolia	Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak
No	No	Macadamia ternifolia	Small-fruited Queensland Nut, Gympie Nut
No	No	Mixophyes fleayi	Fleay's Frog
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Pachyptila turtur subantarctica	Fairy Prion (southern)
No	No	Petauroides volans	Greater Glider (southern and central)
No	No	Petaurus australis australis	Yellow-bellied Glider (south-eastern)
Yes	Yes	Phaius australis	Lesser Swamp-orchid
Yes	Yes	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)

Direct impact	Indirect impact	Species	Common name
No	No	Potorous tridactylus tridactylus	Long-nosed Potoroo (northern)
No	No	Prasophyllum wallum	Wallum Leek-orchid
No	No	Pseudomugil mellis	Honey Blue Eye, Honey Blue-eye
Yes	Yes	Pteropus poliocephalus	Grey-headed Flying-fox
No	No	Rhodamnia rubescens	Scrub Turpentine, Brown Malletwood
Yes	Yes	Rhodomyrtus psidioides	Native Guava
No	No	Rostratula australis	Australian Painted Snipe
No	No	Samadera bidwillii	Quassia
No	No	Stagonopleura guttata	Diamond Firetail
No	No	Sternula nereis nereis	Australian Fairy Tern
No	No	Syzygium hodgkinsoniae	Smooth-bark Rose Apple, Red Lilly Pilly
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Tringa nebularia	Common Greenshank, Greenshank
No	No	Triunia robusta	Glossy Spice Bush
No	No	Turnix melanogaster	Black-breasted Button-quail
No	No	Xeromys myoides	Water Mouse, False Water Rat, Yirrkoo

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	Yes	Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community
No	No	Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland
No	No	Lowland Rainforest of Subtropical Australia
No	No	Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

The proposed action involves several construction activities that have the potential to directly or indirectly impact on EPBC Act listed threatened species and ecological communities. These include:

- Use and temporary storage of hazardous materials
- Removal of vegetation and landscaping
- Topsoil stripping and stockpiling due to potential for erosion and sedimentation
- Potential exposure of acid sulfate soils
- Earthworks due to potential for erosion and sedimentation
- Waste generation due to attraction of pest species.

An overview of Project activities is included in **Att A, Section 2.5, p. 7**. Potential impacts for each of the listed threatened species and ecological community are outlined below.

Applicable potential direct and indirect impacts which apply to all MNES values are included in **Att A, Section 6, pp 38**. Specific potential impacts to each MNES value are outlined below.

Koala (*Phascolarctos cinereus*) - endangered (refer to Att A, Section 7.2.1, pp 59)

Direct impacts**:**

- Loss of 3.94 ha of mapped potentially suitable habitat (noting that some of the potential koala habitat overlaps with mapped Coastal swamp sclerophyll TEC, potential grey-headed flying-fox foraging habitat, and mapped potential migratory terrestrial bird habitat). Of the 3.94 ha, 0.52 ha is regrowth habitat.
- Potential death or injury as a result of vehicle/machinery strike or entrapment during construction.

Indirect impacts:

- Disturbance to fauna from increased light, noise and vibration causing disruption to foraging and/or breeding behaviours
- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

Grey-headed flying-fox (*Pteropus poliocephalus*) - vulnerable (refer to Att A, Section 7.2.2, pp 71)

Direct impacts**:**

- Loss of 3.94 ha of mapped potentially suitable foraging habitat (noting that this is the same area of loss of habitat mapped for the koala, which overlaps with other mapped MNES habitat in some areas as noted above)
- Potential death or injury as a result of machinery strike during construction.

Indirect impacts:

- Disturbance to fauna from increased light, noise and vibration causing disruption to foraging, roosting and/or breeding behaviours
- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

Wallum sedge frog (*Litoria olongburensis*) - vulnerable (refer to Att A, Section 7.2.3, pp 78)

Direct impacts**:**

- Loss of 0.03 ha of mapped potentially suitable habitat
- Potential death or injury as a result of machinery strike or entrapment during construction.

Indirect impacts:

- Disturbance to fauna from increased light, noise and vibration causing disruption to foraging, nesting and/or breeding behaviours

- Habitat degradation through altered hydrology
- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds, pests or point source pollution.
- Indirect impacts through the introduction or spread of chytrid fungus.

1. **Sand yabby (*Cherax robustus*) - vulnerable (refer to Att A, Section 7.2.4, pp 87)**

Direct impacts**:**

- Loss of 0.03 ha of mapped potentially suitable habitat
- Potential death or injury as a result of machinery strike or entrapment during construction.

Indirect impacts:

- Disturbance to fauna from increased light, noise and vibration causing disruption to foraging, nesting and/or breeding behaviours
- Habitat degradation through altered hydrology
- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds, pests or point source pollution.

1. **White-throated needletail (*Hirundapus caudacutus*) – vulnerable (refer to Att A, Section 7.2.5, pp 94)**
2. Direct impacts:

- Loss of predicted habitat

Indirect impacts:

- Disturbance to fauna from increased light, noise and vibration
- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

1. **Whipstick wattle (*Acacia attenuata*) – vulnerable (refer to Att A, Section 7.2.6, pp 99)**
2. Direct impacts:

- Loss of 2.82 ha of potential habitat (being the same potential habitat as the swamp orchid), of which 0.26 ha is regrowth habitat

Indirect impacts:

- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

1. **Hairy-joint grass (*Arthraxon hispidus*) – vulnerable (refer to Att A, Section 7.2.7, pp 107)**
2. Direct impacts:

- Loss of 0.81 ha of potential habitat

1. Indirect impacts:

- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

1. **Swamp orchid (*Phaius australis*) – endangered (refer to Att A, Section 7.2.8, pp 114)**
2. Direct impacts:

- Loss of 2.82 ha of potential habitat (being the same potential habitat as the whipstick wattle), of which 0.26 ha is regrowth habitat

Indirect impacts:

- Habitat degradation from temporary increases in dust, run-off and sedimentation

- Habitat degradation from introduction and spread of invasive weeds and pests.

Native guava (*Rhodomyrtus psidioides*) – critically endangered (refer to Att A, Section 7.2.9, pp 121)

1. Direct impacts:

- Loss of 0.81 ha of potential habitat

Indirect impacts:

- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Habitat degradation from introduction and spread of invasive weeds and pests.

Coastal swamp sclerophyll forest of New South Wales and South East Queensland TEC - endangered (refer to Att A, Section 7.1.1, pp 42)

Direct impacts**:**

- Loss of 2.61 ha of habitat and decrease of patch size
- Potential to increase habitat fragmentation through vegetation clearing at existing road-side edges of TEC patch

Indirect impacts:

- Habitat degradation from temporary increases in dust, run-off and sedimentation
- Altered hydrological regimes and water quality impacts from construction activities
- Habitat degradation from introduction and spread of invasive weeds and pests.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

Significant Impact Assessments (SIAs) were undertaken for each of the threatened species and communities considered known to occur, likely to occur or potentially occurring within the project area. The SIAs were undertaken in accordance with the Significant Impact Guidelines 1.1 - Matters of National Environmental Significance (DEWHA, 2013).

The proposed action is considered likely to result in a significant impact to the Coastal swamp sclerophyll forest of New South Wales and South East Queensland TEC as a result of reducing the extent of the community, increasing fragmentation, and/or adversely affecting habitat critical to the survival of the community. A total of 2.61 ha of Coastal swamp sclerophyll forest TEC was mapped within the project area. Refer to **Att A, Section 7.1.1.9, pp 49** for the SIA for Coastal swamp sclerophyll forest TEC.

The SIAs found the Project is **unlikely** to have a significant impact on the koala, grey-headed flying-fox, wallum sedgefrog, sand yabby, white-throated needletail, whipstick wattle, hair-joint grass, swamp orchid, native guava.

Refer to **Att A, Section 7.2.1.10, pp 67** for the SIA for koala

Refer to **Att A, Section 7.2.2.10, pp 76** for the SIA for grey-headed flying-fox

Refer to **Att A, Section 7.2.3.10, pp 85** for the SIA for wallum sedgefrog

Refer to **Att A, Section 7.2.4.10, pp 92** for the SIA for the sand yabby

Refer to **Att A, Section 7.2.5.10, pp 97** for the SIA for the white-throated needletail

Refer to **Att A, Section 7.2.6.10, pp 104** for the SIA for the whipstick wattle

Refer to **Att A, Section 7.2.7.10, pp 112** for the SIA for the hairy-joint grass

Refer to **Att A, Section 7.2.8.9, pp 118** for the SIA for the swamp orchid

Refer to **Att A, Section 7.2.9.9, pp 126** for the SIA for the native guava

Refer to **Att A, Section 7.3.1.10, pp 131** for the SIA for the fork-tailed swift

Refer to **Att A, Section 7.3.2.10, pp 136** for the SIA for the oriental cuckoo

4.1.4.7 Do you think your proposed action is a controlled action? *

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

The proposed action is considered to be a controlled action due to the likelihood of significant impacts to the Coastal swamp sclerophyll forest TEC which includes the loss of 2.61 ha of the TEC.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

The proposed action has followed the hierarchy of avoidance, followed by minimisation, mitigation, and offsetting as a last resort for impacts to MNES protected under the EPBC Act.

1. The Project currently includes a 10 m wide buffer from the edge of the design footprint to allow for minor changes to the design during Detailed Design and also a construction footprint to allow for construction of the ramp embankments and construction working room. Further refinement of the design and also reduction of the construction footprint will be progressed during Detailed Design which will focus on the reduction of impacts on ecological values including TEC patch size and extent. As these reductions in footprint size are not able to be quantified at referral stage the impacts presented in this report are considered a worst-case scenario impact extent.

Additional mitigation measures to reduce the loss of habitat for the TEC include:

- Identification of no-go zones on detailed design drawings and denoting significant trees or no-go zones with flagging tape on site during construction to avoid removal of TEC within avoidance areas and adjacent to the project area
- Locating ancillary infrastructure areas outside the TEC and in areas that have previously been disturbed
- Restricting access tracks to the existing road corridor, where possible
- Development and implementation of a Flora Management Plan to be included within the Environmental Management Plan (Construction)(EMP(C)
- A suitably qualified person is to conduct a pre-clearance survey, prior to any clearance activities
- During operation of the Project revegetated areas will be maintained and monitored by TMR.

Habitat fragmentation

Mitigation measures to reduce the potential for additional habitat fragmentation include:

- Identification of no-go zones on detailed design drawings and denoting significant trees or no-go zones with flagging tape on site during construction to avoid removal of TEC within avoidance areas and adjacent to the project area
- Locating ancillary infrastructure areas outside the TEC and in areas that have previously been disturbed
- Restricting access tracks to the existing road corridor, where possible
- During operation of the Project revegetated areas will be maintained and monitored by TMR.

Vegetation/habitat degradation from increased dust, erosion and/or sedimentation

Potential impacts associated with increased dust, run-off and sedimentation will be managed through the development and implementation of an EMP(C) and Erosion and Sediment Control Plan (ESCP). These construction documents will include the following measures, as a minimum:

- The clearing areas will be minimised as much as possible.
- The clearing boundaries will be clearly marked on site, and the construction drawings and signed (or flagged) on-site to prevent accidental disturbance of the vegetation community.
- Temporary works areas will be located away from the TEC boundaries where possible.
- Dust suppression activities will be conducted, including watering trucks to reduce dust emissions
- Clean-water diversion to maintain hydrological regimes in downslope areas where water can be diverted around construction sites
- Capture of dirty water through erosion and sediment controls and use of other run-off and sediment control devices, such as bunding and sediment fencing, to reduce the amounts of sediment discharged to downstream areas. Erosion and sediment control devices will be installed prior to soil disturbing works commencing. Devices will be inspected and maintained at regular intervals and after rainfall events.

Altered hydrological regimes and water quality impacts

Changes in hydrology will be managed through the use of mitigation measures specifically regarding flow management during construction to avoid the isolation of existing surface water features (e.g., avoiding surface water diversions and creation of isolated pools in order to maintain typical hydrological regimes required by native species associated with the adjacent inundation area). These will be modelled and designed as part of the hydraulic and hydrology designs.

Surface water quality, hydrology and groundwater impacts can be managed through the development of appropriate stormwater quality management. A water quality strategy will be developed for the Project, which includes the use of erosion and sediment controls, bioretention basins, spill capture bunds, and vegetated buffer strips. The strategy will be developed during the detailed design phase of the Project. Furthermore, hydrological modelling undertaken to date has demonstrated a need to retain the existing culvert underneath the existing Motorway between the TEC patch to enable activation of the floodplain to the east. Therefore, this will be a primary consideration during Detailed Design.

Introduction and spread of invasive species

To manage potential impacts from the introduction and spread of invasive species, the following measures will be applied:

- A suitably qualified person is to be engaged to undertake a pre-construction survey to identify and map (if required) any restricted matter under the Biosecurity Act within or adjacent to the project area
- Exclusion zones for biosecurity matters are to be clearly marked, where practical and required
- Restricted matter plants and other environmental weeds are to be treated within the project footprint within appropriate timeframes to establish successful treatment prior to construction works in accordance with the relevant Department of Primary Industries (DPI) factsheets or equivalent
- APVMA registered herbicides will be utilised throughout the Project footprint
- Where they are permitted to be applied, the use of pesticides/herbicides is to be undertaken only by an licensed commercial operator
- All imported fill or other construction materials are certified weed free using DPI’s Weed Declaration form
- No weed species or material containing weeds is to be reused on site as mulch or chipped material
- Construction vehicles and equipment will undergo wash down in accordance with the **DPI Come Clean, Go Clean**
- All construction activities will comply with the **Arrive Clean, Leave Clean Guidelines to help prevent the spread of invasive plant diseases and weeds threatening our native plants, animals and ecosystems** (DCCEEW 2015), which includes plant pathogen hygiene measures
- Store and dispose of weed infested soils appropriately, including at a licensed waste disposal facility
- Bins shall be provided across the work site for food waste. These are to be emptied on a regularly basis to prevent overflow or attraction of pest species
- Domestic pets shall not be permitted on the work site during construction
- All construction staff shall attend inductions informing them of their general biosecurity obligation and fire ant awareness training.
- A Biosecurity Management Plan will be developed by the Construction Contractor and will be included as part of the EMP(C), which will include management, monitoring and reporting requirements for biosecurity matters, vehicle washdown procedures, toolbox talk and induction requirements. TMR will liaise with Sunshine Coast Council in regard to feral animal control.

Refer to **Att A, Section 7.1.1.8, pp 55** for further details on the mitigation measures proposed for the Coastal swamp sclerophyll forest TEC.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

It is anticipated that if offsets are required it will be for significant residual impacts to the following MNES:

- 2.61 ha of Coastal swamp sclerophyll forest TEC.

An Environmental Offsets Strategy will be developed to demonstrate the feasibility of securing and delivering a scientifically robust offset program for the proposed action. The Environmental Offsets Strategy will address requirements set out in the **EPBC Act Environmental Offsets Policy** (DSEWPC, 2012). Specifically, the strategy will outline:

- The proposed offset delivery approach and timeframes for future tasks in the offset program
- Results of the offset availability analysis
- Information on the proposed offset site currently under investigation in relation to its suitability to provide the necessary offsets for the Project
- Proposed habitat scoring methodologies for MNES values to be offset
- For each MNES value to be offset, a description of the final conservation outcomes being sought, progressive milestones to be achieved to demonstrate advancement towards these final outcomes and high-level management measures proposed to achieve the progressive milestones and final conservation outcomes.

TMR will investigate offset options if required and will consider the following in the offset provision:

- Size of available area
- Connectivity to other habitats
- Proximity to impact area (as close as possible)
- Surrounding land uses.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	Actitis hypoleucos	Common Sandpiper
Yes	Yes	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris canutus	Red Knot, Knot
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
Yes	Yes	Cuculus optatus	Oriental Cuckoo, Horsfield's Cuckoo
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	Yes	Hirundapus caudacutus	White-throated Needletail
No	No	Limnodromus semipalmatus	Asian Dowitcher
No	No	Limosa lapponica	Bar-tailed Godwit
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Pandion haliaetus	Osprey
No	No	Tringa nebularia	Common Greenshank, Greenshank

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

The Project has the potential to impact 4.12 ha of suitable migratory terrestrial bird habitat located within the remnant and high-value regrowth within the project area (noting that some of the mapped potential migratory terrestrial bird habitat overlaps with areas that are also mapped as koala habitat, grey-headed flying-fox habitat and Coastal swamp sclerophyll forest TEC). These areas are habitat for typically common and widespread migratory terrestrial bird species.

Based on habitat assessments and the migratory bird survey program, the project area does not contain any suitable networks of foraging and roosting habitat for shorebirds and no potential habitat for these species has been mapped or is considered likely to occur. No direct impacts to shorebird roosting and foraging habitat will occur as a result of the Project.

The Project may indirectly impact migratory bird species through disturbance from increased light, noise and vibration, habitat degradation by increased dust, run-off and sedimentation, introduction and spread of invasive pests and weeds.

Migratory birds are discussed in detail in **Att A, Section 7.3, pp 128**.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.5.6 Describe why you do not consider this to be a Significant Impact. *

Three separate SIAs were undertaken for the three migratory shorebird species either considered migratory only, or both migratory and threatened status under the EPBC Act have been undertaken. These included the following species:

- Vulnerable:
  - White throated needletail (*Hirundapus caudacutus*)
- Migratory
  - Fork-tailed swift (*Apus pacificus*)
  - Oriental cuckoo (*Cuculos optatus*)

1. The proposed action is not considered a controlled action for impacts to migratory species as it is unlikely to result in a significant impact to any migratory species, based on the results of the SIAs undertaken in accordance with the Significant Impact Guidelines 1.1 - Matters of National Environmental Significance (DEWHA, 2013). Refer to **Att A, Sections 7.3.1.10, pp 131 and 7.3.2.10, pp 136**. No potential networks of roosting or foraging sites were identified within the project area or considered likely to be indirectly impacted by the Project, therefore the Project is unlikely to have a significant impact on the migratory species (including those listed as threatened). No important populations or important habitat for migratory bird species were observed or considered likely to be present within the project area. No ecologically significant proportion of the populations of these three species is present within or adjacent to the project area. In addition, due to the relatively small amount of potential migratory terrestrial bird foraging habitat being impacted by the Project, and the large extent of higher quality suitable foraging habitat in the broader landscape, the Project is unlikely to have a significant impact on the migratory terrestrial bird species.

4.1.5.7 Do you think your proposed action is a controlled action? *

No

4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action. *

Based on the significant impact assessments undertaken for each migratory bird species and the outcomes of these assessments, the project is not considered a controlled action for migratory bird species.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Disturbance to fauna from increased light, noise and vibration

The Project is likely to result in a temporary increase in artificial sources of light, noise and vibration during construction. These impacts will be managed through implementation of an EMP(C).

Consideration of lighting design will be undertaken in accordance with the ***National light pollution guidelines for wildlife*** (DCCEEW, 2023) to reduce lighting impacts during operation of the Project. The Project will be designed in accordance with the Principles of Best Practice Lighting Design and the above referenced National Guideline.

Noise impact assessment will be undertaken and will inform mitigation measures required for noise during construction and operational phases of the Project and to manage future road noise.

To manage potential impacts from increased light, noise and vibration, the following mitigation measures will be used:

- Design to limit, and where possible remove any light spill into adjacent wetlands habitats
- During construction, if mobile lighting is used it should be prevented from being aimed into adjacent wetland habitat.

Habitat degradation by increased dust, run-off and sedimentation

The following mitigation measures will be used to minimise the impacts of dust, run off and sedimentation during construction of the Project:

- An EMP(C) and ESCP will be prepared by the Construction Contractor in accordance with TMR's MRTS04,28,51,52 and associated annexures to inform standards for controls such as weed hygiene, erosion, fuels and hazardous substances, fire, etc. and will include erosion and sediment control measures. These contract documentations will also include any conditions of approvals received.
- Routine dust suppression and monitoring will be undertaken throughout construction (e.g., water trucks)
- Erosion and sediment control measures will be installed prior to commencement of vegetation clearing
- Clearing will be undertaken in a staged, sequential manner
- Areas subject to clearing will be stabilised as soon as practicable
- Directional lighting will be used for nightworks
- Weather conditions will be monitored during the construction stage and temporary controls will be established during extreme weather events
- Rehabilitation of temporary construction areas will be undertaken as soon as practicable after clearing.

Introduction and spread of invasive weeds and pests

To manage potential impacts from the introduction and spread of invasive species, the following measures will be applied:

- A suitably qualified person is to be engaged to undertake a pre-construction survey to identify and map (if required) any restricted matter under the Biosecurity Act within or adjacent to the project footprint
- Exclusion zones for biosecurity matters are to be clearly marked, where practical and required
- Restricted matter plants and other environmental weeds are to be treated within the project footprint within appropriate timeframes to establish successful treatment prior to construction works in accordance with the relevant Qld Department of Primary Industries (DPI) factsheets or equivalent
- The use of pesticides/herbicides is to be undertaken only be an appropriately licensed commercial operator
- APVMA registered herbicides will be utilised throughout the Project footprint.

- All imported fill or other construction materials are certified weed free using DPI's Weed Hygiene Declaration form
- No weed species or material containing weeds is to be reused on site as mulch or chipped material
- Construction vehicles and equipment will undergo wash down in accordance with the **DPI Come Clean, Go Clean**
- All construction activities will comply with the **Arrive Clean, Leave Clean Guidelines to help prevent the spread of invasive plant diseases and weeds threatening our native plants, animals and ecosystems** (DCCEEW 2015), which includes plant pathogen hygiene measures
- Store and dispose of weed infested soils appropriately, including at a license facility
- All construction staff shall attend inductions informing them of their general biosecurity obligation.
- A Biosecurity Management Plan will be developed by the Construction Contractor and included as part of the EMP(C), which will include management, monitoring and reporting requirements for biosecurity matters, vehicle washdown procedures, toolbox talk and induction requirements.
- TMR will liaise with Sunshine Coast Council in regard to feral animal control.
- Measures to avoid impacts from pest fauna species will include:
    - A Waste Management Plan will be developed by the Construction Contractor and included as part of the EMP(C). This will detail the location and specifications for disposal and removal of waste from the construction site
    - Responsible waste management practices (e.g., not leaving out food waste and not feeding wildlife) will be implemented and followed by all construction personnel. All waste will be stored in secure temporary holding containers and transported off site
    - Sightings or evidence of pest animals will be recorded during construction. If increased densities of pest animals are observed, or new pest animals are identified, humane pest controls will be implemented to manage numbers
    - Construction staff will not bring domestic animals to the construction site
    - All construction personnel shall attend environmental training as part of site inductions. As part of this training, all personnel will be instructed on their responsibilities related to avoiding and minimising the introduction/attraction to the construction site of feral animals.

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Offsets are not proposed as the Project will not have a significant residual impact on any migratory species.

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action involves upgrades to roads and does not involve any nuclear actions or impacts to nuclear actions.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not within or in proximity to any Commonwealth marine areas.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not within or in proximity to the Great Barrier Reef.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not within or in proximity to any water resources in relation to large coal mining development or coal seam gas.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not within or in proximity to any Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not within or in proximity to any Commonwealth heritage places overseas.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

The current Project is a prescribed State election commitment which has specified the infrastructure to be progressed. However, four options were considered as alternatives to the Project as described below:

- Sunshine Motorway, David Low Way Duplication (Mooloolaba to Peregian) – uncommitted project
  - TMR has future aspirations to duplicate the Sunshine Motorway between Pacific Paradise and Coolum and in the process of shortlisting design options for further investigation. The project is currently at Preliminary Evaluation Stage but is not committed for design and construction. The election commitment will complement the future duplication and has been designed to minimise rework once the motorway is duplicated and additional environmental impacts. The south facing ramps project has been removed from this broader scope to be delivered in its own right.
- North Facing Ramps (Full Interchange)
  - This was not included in the brief from the government or formed part of the election commitment. However, traffic modelling including north facing ramps was performed for due diligence. Traffic modelling indicates that the need for north facing ramps is much less significant due to the number of daily trips per day which occur in a southern direction. Consequently, as north facing ramps would not result in alleviating traffic congestion north-facing ramps were not progressed. It is also noted that north facing ramps would require replacement of the existing overpass on West Coolum Road with a new bridge to cater for all traffic movements. This would have a larger impact on the adjacent high risk environmental areas, as well as significant cost implications.
- Option with south-facing ramps, including 2km section of duplicated carriageway initially designed as an alternative option to address the election commitment requirements.
  - Southbound entry ramp length was 720m in length with northbound exit ramp 550m in length. This option was significantly more costly compared to the current reference design, having a greater impact on TECs located on the eastern side of the motorway. Due to the uncommitted nature of the motorway duplication project, additional impact to MNES habitats and cost, this option was not progressed.
- Current proposed design for shortened south-facing ramps.
  - The current design provides the necessary capacity to cater for current and future demand at the intersection while alleviating traffic congestion on South Coolum Road and Yandina-Coolum Road. The design also minimises environmental impacts and meets the project objective, whilst keeping costs in line with the budgetary constraints. The southbound entry ramp has been reduced to 550m in length and the northbound exit ramp reduced to 490m, resulting in less clearing and environmental impact.

As the Project involves the addition of new infrastructure to an existing major motorway, alternative locations are not feasible beyond those described above. If the Project were not to proceed, the following may occur:

- Ongoing and increasing congestion as a result of population growth increasing peak traffic demands
- Ongoing and increasing delays to vehicles and daily commuters
- Increased travel times for road users accessing the central business district of Maroochydore, impeding economic growth
- Increasingly frequent safety issues resulting from congestion and unplanned interactions with aging and unintegrated active transport infrastructure
- Ongoing and increasing community concern regarding traffic congestion.
- The Project timeline is dependent on several factors including funding, community consultation, detailed design and obtaining relevant regulatory approvals and construction contracts. The construction timeline has not yet been confirmed but is indicatively from late 2027 to end of 2028.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	08/05/2026	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Sunshine Motorway (Mooloolaba - Peregian), West Coolum Road, upgrade interchange https://www.tmr.qld.gov.au/projects/sunshine-mot..			High

1.3.2.17 (Person proposing to take the action) Proposer's history of responsible environmental management

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Environmental Management https://www.tmr.qld.gov.au/community-and-environ..			High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation’s environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Environmental Processes Manual https://www.tmr.qld.gov.au/business-industry/Tec..			High
#2.	Link	Environmental Sustainability Policy https://www.tmr.qld.gov.au/community-and-environ..			High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

3.1.1 Current condition of the project area's environment

Type	Name	Date	Sensitivity	Confidence
#1.	Document 12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Sunshine Coast Planning Scheme 2014 https://www.sunshinecoast.qld.gov.au/development..			High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Blue Heart Sunshine Coast https://www.sunshinecoast.qld.gov.au/council/pla..			High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf	07/05/2026	No	High

Significant Impact Assessment Report

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High
#2.	Link	Arrive Clean, Leave Clean https://www.dcceew.gov.au/environment/invasive-s..			High
#3.	Link	Come Clean Go Clean https://www.dpi.qld.gov.au/news-media/campaigns/..			High

4.1.4.11 (Threatened Species and Ecological Communities) Proposed offsets relevant to avoidance or mitigation measures

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	EPBC Act environmental offsets policy https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	12682632-REP-MNES SIA Assessment-Rev0_compress.pdf Significant Impact Assessment Report	07/05/2026	No	High

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Arrive Clean, Leave Clean https://www.dcceew.gov.au/environment/invasive-s..			High
#2.	Link	Come Clean Go Clean https://www.dpi.qld.gov.au/news-media/campaigns/..			High
#3.	Link	National Light Pollution Guidelines for Wildlife https://www.dcceew.gov.au/environment/biodiversi..			High

5.2 Declarations

Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	39008488373
Organisation name	GHD PTY LTD
Organisation address	2000 NSW
Representative's name	Shelley Chadwick
Representative's job title	Technical Director - Environmental Science
Phone	54138154
Email	shelley.chadwick@ghd.com
Address	3 South Sea Islander Way, Maroochydore, QLD 4558

☑ Check this box to indicate you have read the referral form. *

☑ Check this box to confirm these are the correct identification details. *

☑ By checking this box, I, **Shelley Chadwick of GHD PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	39407690291
Organisation name	Department of Transport and Main Roads
Organisation address	4000 QLD
Representative's name	Lachlan McKenzie

Representative's job title	Principal Environmental Officer
Phone	(07) 4931 1571
Email	lachlan.h.mckenzie@tmr.qld.gov.au
Address	50 Wises Road, Maroochydore

☑ Check this box to indicate you have read the referral form. *

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Lachlan McKenzie of Department of Transport and Main Roads**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

✔ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

☑ Check this box to indicate you have read the referral form. *

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Lachlan McKenzie of Department of Transport and Main Roads**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.