

Logan and Gold Coast Faster Rail

Application Number: **01570**Commencement Date: **08/12/2022**Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Logan and Gold Coast Faster Rail

1.1.2 Project industry type *

Transport - Land

1.1.3 Project industry sub-type

Railway

1.1.4 Estimated start date *

1/06/2024

1.1.4 Estimated end date *

31/12/2030

1.2 Proposed Action details

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

Proposed action description

The State of Queensland, represented by the Department of Transport and Main Roads in Queensland (**TMR**) is proposing to duplicate the existing rail corridor between Kuraby and Beenleigh Station from two to four tracks, including associated station and rail system upgrades (the **proposed action**).

Key features of the **proposed action** include the construction of the following:

- Duplication of approximately 20 km of rail corridor and upgrades to associated rail systems between Kuraby and Beenleigh Stations resulting in an increase from two tracks to four tracks;
- Eight station upgrades including a station relocation (Trinder Park Station) to improve accessibility, safety and amenity, including platform straightening, and new pedestrian bridges;
- Park 'n' Ride upgrades, including a new multi-story Park 'n' Ride at Beenleigh Station with an integrated bus interchange;
- Extension of the cattle siding at Holmview Station;
- Potential duplication of the rail tunnel under Beenleigh Town Square;
- Dedicated active transport facilities and paths along the corridor;
- Dedicated rail maintenance access road adjacent to the rail corridor;
- Adjacent local road network alterations associated with the railway duplication;
- Public Utility Plant (PUP) relocations; and
- Removal of rail crossings at Woodridge (Railway Parade), Holmview (Spanns Road) and Beenleigh (Holmview Road).

Further information in relation to the proposed action is provided in **Attachment A** - Proposed action additional information, pages 1, 2 and 3.

The proposed action is currently at reference design phase. The design of the proposed action has been developed and refined to maximise the use of disturbed areas, and avoid and minimise further vegetation clearing wherever feasible. The majority of works will be undertaken in a highly urbanised, brownfield environment, and the alignment of the widened corridor has been developed considering rail design and operational requirements whilst minimising potential impacts to habitat, significant flora and fauna and the community. Avoidance has also included the designation of temporary footprint requirements, such as construction laydown areas, to maximise the use of previously cleared lots/areas and avoid High Value Regrowth adjacent to the corridor.

The proposed action is located within an area of 295 ha (the Project Area), made up of:

Approximately 42.55 ha of remnant, high value regrowth and regrowth vegetation made up of Eucalyptus woodland to open forest, complex notophyll to microphyll vine forest and melaleuca, casuarina and eucalyptus open forest.

Approximately 166.3 ha of non-remnant vegetation, consisting of:

- Areas adjacent to wetlands and banks of waterways (approximately 5.9 ha)
- Areas of sparse foraging habitat, including scattered trees present in landscaped urban areas and residential backyards (approximately 160.4 ha)
- Non-remnant vegetation with no fauna habitat value made up of existing rail corridor, train station and cleared parcels of land (approximately 86.1 ha).

Purpose of proposed action

To support growing population and rail patronage demand between Brisbane, Logan and the Gold Coast, the number of Beenleigh and Gold Coast train services will need to double over the next 20 years. The rail line between Kuraby and Beenleigh is a key capacity bottleneck on the rail corridor. The Queensland Government, together with the Australian Government, has committed \$2.6 billion towards increasing the number of tracks between Kuraby and Beenleigh from 2 to 4 tracks, with modernised rail systems, station upgrades and level crossing removals. Additional tracks will require a wider rail corridor and track straightening in some areas.

Proposed action activities

The proposed action includes the following construction activities:

- Site preparation works, including clearing and grubbing, earthworks, and establishment of temporary construction compounds and laydowns;
- PUP relocation works;
- Construction of new tracks, including bridges and associated drainage works;
- Roadworks (including minor road realignments resulting from track widening);
- Station rebuilds (including upgrade and relocation of stations).

All construction activities are within the proposed action disturbance footprint of 295 ha.

Proposed action potential impacts

The proposed action will result in potential direct and indirect impacts to ecological values within the Project Area. With the sensitive siting and design of the proposed action, impacts have been substantially reduced. Suitable avoidance, mitigation and management techniques have been developed to remove or further reduce impacts, particularly indirect impacts to ecological values; however, the proposed action will impact potential habitat for MNES.

Potential impacts to threatened and migratory species include:

Direct impacts:

- Vegetation clearing and loss or alteration of conservation significant flora and fauna habitat;
- Potential habitat fragmentation; and
- Potential injury or mortality of conservation significant fauna.

Indirect impacts:

- Potential impacts to waterways;
- Potential spread or exacerbation of weed spread;
- Potential for spread of invasive fauna species; and
- Potential disturbance of conservation significant fauna as a result of noise, lighting and dust.

Additional works not included in the proposed action

There are **additional works** proposed to be undertaken by TMR which are independent of the proposed action. These works are identified in this referral for clarity, as these works will occur in close proximity to the proposed action, however, they are not part of the proposed action. These additional works are limited, including grade separations (level crossing removals), and the new generation train signalling system), and are discussed further in **Attachment B** – Additional works, pages 1 and 2. In addition, these additional works do not impact on MNES, as detailed in **Attachment B** - Additional works, pages 1 and 2.

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)

EPBC Number	Project Title
2022/09348	Loganlea Station Relocation and Park 'n' Ride Expansion

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

The proposed action is not the first stage of a staged development or larger project.

Loganlea Station Relocation (LSR) sits within the physical rail corridor of Logan and Gold Coast (LGC) Faster Rail project. As per the EPBC Act staged development-split referrals policy LSR is a stand-alone project, which has its own business case, funding and community consultation and can operate independently of LGC. LSR received a 'not a controlled action' determination on 14th November 2022 (EPBC 2022/09348).

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

A summary of Commonwealth or state legislation, planning frameworks or policy documents relevant to the proposed action and how they are relevant is presented in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 3.0, pages 13-15.

Commonwealth*Environment Protection and Biodiversity Conservation Act 1999*

The EPBC Act identifies 'nationally significant' animals, plants, habitats and places as MNES to be protected. The Project Area intersects locations with potential to support habitat for MNES. To assess potential impacts of land use changes and new developments, a significant impact assessment informed by desktop and field investigations was undertaken against the EPBC Act significant impact guidelines, which indicates the proposed action is likely to have a significant impact on MNES.

The EPBC Act recognises Weeds of National Significance (WONS), which threaten natural landscapes, waterways and coastal areas by displacing native species, contributing to land degradation and reducing farm and forestry productivity. Threat abatement plans are considered to identify research, management, and other actions necessary to reduce the impact of a listed key threatening process on native species and ecological communities to assist the long-term survival of affected native species or ecological communities in the wild.

State*Aboriginal Cultural Heritage Act 2003*

The Project Area is located across land belonging to numerous Traditional Owner Groups. These include the Jagera People and Turrbal Association in the north, the Danggan Balun (Fiver Rivers) through the central extent to Logan River and the Gold Coast Native Title Group in the southern extent.

Consultation with the relevant Traditional Owner groups will manage residual risk to heritage values. Requirements of resultant Cultural Heritage Management Agreements will be carried forward into the construction phase and incorporated into the Construction Contractors Environmental Management Plan – Construction (EMP(C)).

Queensland Heritage Act 1992

There are several listed heritage items in or within proximity to the Project Area under the Queensland Heritage Register / Queensland National Trust Heritage Register, Logan City Council Heritage Register, and Brisbane City Council Heritage Register.

Consultation with relevant stakeholders responsible for managing identified historical heritage places will manage the residual risk to heritage places. Management measures resulting from stakeholder engagement will be carried forward into the construction phase and incorporated into the Construction Contractors EMP(C).

Acquisition of Land Act 1967 (ALA)

The proposed action will require residential property acquisitions, by way of negotiation or resumption under the ALA within the Project Area. The Project Area for the proposed action has been developed based on the reference design and includes allowance for future design progression as well as construction buffer and land use requirements (e.g. laydown areas). The design will be refined within the Project Area with consideration for potential impacts to environmental constraints including vegetation and habitat for threatened species and interaction with waterways. As the Project Area encroaches privately held residential allotments, the requirement for land acquisition within the Project Area is being progressed concurrently with this referral. TMR will continue to consult with property owners who may be

subject to a partial or full land resumption as the design progresses.

Biosecurity Act 2014 (Biosecurity Act)

The proposed action will meet the General Biosecurity Obligations (GBO) through development of the EMP(C) to manage biosecurity risk during the construction phase. Located in Fire Ant Biosecurity Zone 2, the proposed action will detail approved Fire Ant high risk material disposal sites. Where movement controls cannot be adhered to a Biosecurity Instrument Permit must also be obtained, the conditions within adhered to and all records and kept on site. Similarly, GBO for weed management will also be carried through into the Construction Contractor's EMP(C) and upheld throughout construction.

Environmental Protection Act 1994 (EP Act)

The proposed action will comply with the general environmental duty, particularly when undertaking activities with the potential to cause environmental harm.

Lots within the Project Area are located on the Environmental Management Register (EMR). Soils within these lots may be contaminated due to use of contaminated fill during previous construction activities and/or contamination due to historic and existing use as a rail corridor. Contractual requirements have been included to ensure detailed contaminated land investigations through subsequent design phases of the proposed action will inform ongoing management and permitting through to construction.

Vegetation Management Act 1999 (VM Act)

The proposed action is expected to impact mapped REs and other regulated vegetation. As State Government Supported Transport Infrastructure, the proposed action is exempt from requiring a development approval for clearing of regulated vegetation for the construction or maintenance of infrastructure as provided under Schedule 21 of the Planning Regulation 2017.

Nature Conservation Act 1992 (NC Act)

Nature Conservation (Plants) Regulation 2020 (NC Plants Reg)

Ecological investigations sought to identify NC Act-listed Critically Endangered, Endangered, Vulnerable or Near threatened (CREVNT) flora within the Project Area. The proposed action has potential to directly impact suitable habitat for threatened flora species identified by field investigations as having potential to occur within the disturbance area. Only vulnerable Macadamia nut (*Macadamia integrifolia*) was confirmed present but not considered to occur in the wild (i.e. planted), therefore clearing permit requirements do not apply. Exemptions apply for clearing outside of a high risk area on the flora survey trigger map; however, a flora survey and protected plant clearing permit is required for removing a protected plant or within 100 m of the plant. Under the Act an offset may be required as a condition of your permit approval to compensate for unavoidable impacts on a protected plant species in the wild. This will be informed by further survey during detailed design phases.

Nature Conservation (Animals) Regulation 2020 (NC Animals Reg)

The proposed action will utilise the existing State-wide TMR Low-Risk Species Management Program (SMP) to protect and manage any breeding places (e.g. nests) for least concern species that may be established and require relocation prior to construction.

A High-Risk SMP may be required if colonial breeders or animal breeding places for CREVNT species are found in the Project Area. This will be informed by further survey during detailed design phases.

Planning Act 2016 (Planning Act)

Coastal Protection and Management Act 1995 (Coastal Act)

The proposed action will intersect and traverse tidal watercourses and associated Coastal Management District (CMD). Consequently, the proposed action is also expected to impact areas of marine plants. Ecological investigations will support the quantification of expected impacts to areas of marine plants and guide environmental design responses for infrastructure within tidal areas to support procurement of development approvals and compliance with accepted and performance outcomes under State legislation.

Fisheries Act 1994

The proposed action will intersect and traverse mapped fish passage waterways. Proposed bridge and culvert works will include structures with potential to meet criteria for permanent waterway barriers within fisheries waterways. Ecological investigations will identify where existing infrastructure is deficient, where new infrastructure is required and guide environmental design responses for infrastructure within areas where fish passage is required to support procurement of development approvals and compliance with accepted and performance outcomes under State legislation.

Environmental Offsets Act 2014 (Offsets Act)

Provisions exist under the Offsets Act to avoid the duplication of offsets conditions between Commonwealth and Queensland requirements. Under these provisions:

- the Queensland Government cannot impose an offset condition for a prescribed environmental matter if the same and/or substantially the same impact and/or matter has been subject to assessment under the EPBC Act, regardless of whether an offset condition was imposed by the Commonwealth or not; and
- when considering whether to apply an offset condition, a Queensland Government agency must consider whether a relevant offset condition that has already been imposed is for a substantially the same impact and/or matter.

Acquired development approvals and associated conditions will be included in the construction contract documents and adopted by the Construction Contractor in their EMP(C).

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. *

On 3 September 2021 an eight-week consultation period was undertaken to seek community and stakeholder feedback to refine the proposed action scope and reference design. Tailored information was also provided to property owners whose properties might be directly impacted by the proposed action.

Engagement was targeted at three broad groups who were identified as stakeholders who might be impacted should the proposed action proceed. This included:

- Directly impacted property owners who might be subject to a partial or full land resumption.

- The community surrounding the rail corridor and/or use the Beenleigh line.
- Stakeholders such as local community groups and special interest organisations who have a potential geographical or subject matter interest in the proposed action. This included elected representatives from Federal, State and Local Governments.

There were more than 2200 interactions over the eight-week consultation period between 3 September and 29 October 2021. This consisted of:

- More than 300 letters sent to directly impacted property owners.
- 25,000 newsletters distributed to households in Kuraby, Woodridge, Logan Central, Kingston, Meadowbrook, Loganlea, Bethania, Edens Landing, Holmview and Beenleigh.
- 70 posters installed at stations between Kuraby and Varsity Lakes.
- 15,041 page views and 9,085 unique visits to the Department of Transport and Main Roads (TMR) webpage.
- 7,631 page views and 3,799 unique visits to the TMR Have your say consultation webpage.
- 145,254 views of TMR's Facebook post, with a 4.72% click through rate to the website.
- 12 station pop-ups and market stalls, and seven community information sessions and staffed displays, attended by 579 community members.
- 172 meetings with property owners and stakeholders.
- 332 comments on the interactive map.
- 101 online surveys and 34 feedback forms completed.
- 293 phone calls received to the information line.
- 391 emails received and addressed through the inbox.
- 11 formal submissions.

The key themes captured throughout the consultation were, in order of priority:

- Upgrading stations between Kuraby and Beenleigh with modern facilities.
- Providing an active transport corridor that connects with existing pedestrian and local cycle links.
- Improving access and safety to stations, minimising traffic impacts from changes to local road networks and visual, safety, and noise considerations.
- Alternative design suggestions for the rail corridor.
- Upgrading or removing level crossings improve traffic congestion and safety.
- Environmental impacts.
- Minimising the number of properties impacted by the proposed action design, property acquisition, property values and uncertainty about future property decisions.
- Noise management and mitigation measures and operational impacts during construction.

Following consultation, an overview and key insights summary was distributed on 6 April 2022, to all those who participated and registered for updates. Hard copies were provided to electoral offices, and it was uploaded to the website (see - **Attachment D** - Logan Gold Coast Faster Rail Update (Feb 2022), pages 1 and 2).

Since that time the team has been working through feedback from the consultation to refine the design. Ongoing consultation has taken place with directly impacted property owners to provide information on property impacts. On 12 September 2022, an update was distributed electronically to all who registered for communications (see **Attachment E** – Logan Gold Coast Faster Rail Project Update, pages 1 and 2). It has also been uploaded to the website and hard copies provided to electoral offices. Responsive engagement will continue via the phone number (1800 957 066) and email address (LoganGoldCoastRail@tmr.qld.gov.au), and we will continue to meet with impacted property owners and other stakeholders.

A Stakeholder Engagement Plan is in the process of being completed for the proposed action. This will identify requirements for engaging with the Traditional Owners (TO). The TOs for the proposed action include Jagera People #2 and Turrbal Association Inc, located in the northern extent of the Project Area and Danggan Balun (Five Rivers) and Gold Coast Native Title Group, located in the central and southern extent of the Project Area. TMR are in the process of organising a program to have the TOs undertake walk-over surveys for high-risk (i.e. Category 4 and 5) areas within the proposed actions disturbance footprint. Pending the results of these surveys, TMR will discuss further recommendations with the TOs including a form of agreement or management plan to manage cultural heritage during the construction phase.

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@awe.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	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia
Referring party details	
Name	Jared Brook
Job title	Principal Environmental Consultant
Phone	0431822333
Email	jared.brook@aecom.com
Address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia

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	Floor 3, 61 Mary Street, Brisbane 4000, QLD

Person proposing to take the action details

Name	Lynnell Davis
Job title	Principal Environmental Officer
Phone	07 3066 3630
Email	lynnell.w.davis@tmr.qld.gov.au
Address	Floor 3, 61 Mary Street, Brisbane 4000, QLD

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. *

Taking account of its extensive projects and operations across Queensland, TMR has a satisfactory record of environmental management. TMR has not been subject to proceedings under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

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 (TMR, 2021) and environmental management process. The policy outlines how TMR will manage impacts on natural, human and cultural environments by:

- 1) meeting the statutory obligations of all relevant environmental and heritage legislation as a minimum standard
- 2) considering the effects on stakeholders and long-term relationships when carrying out statutory obligations, and seeking feedback on our performance
- 3) acting as a good government agency and adopting a proactive approach to environmental and heritage management
- 4) improving awareness of environmental and heritage management processes, standards and responsibilities among TMR's employees and contractors
- 5) ensuring the approach to the management of environmental and heritage impacts embrace the hierarchy of "avoid, minimise and mitigate" in a financially feasible manner.

TMR undertakes works in accordance with their comprehensive Environmental Processes Manual (TMR, 2023), which applies a risk-based approach to identify, assess and manage environmental risks. The Environmental Processes Manual is available to view on the TMR website (TMR, 2023).

Further information about the TMR's environmental management is available on the TMR Environmental management website (TMR, 2022).

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	Floor 3, 61 Mary Street, Brisbane 4000, QLD
Proposed designated proponent details	
Name	Lynnell Davis
Job title	Principal Environmental Officer
Phone	07 3066 3630
Email	lynnell.w.davis@tmr.qld.gov.au
Address	Floor 3, 61 Mary Street, Brisbane 4000, QLD

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	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia
Representative's name	Jared Brook
Representative's job title	Principal Environmental Consultant
Phone	0431822333
Email	jared.brook@aecom.com
Address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia

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	Floor 3, 61 Mary Street, Brisbane 4000, QLD
Representative's name	Lynnell Davis
Representative's job title	Principal Environmental Officer
Phone	07 3066 3630
Email	lynnell.w.davis@tmr.qld.gov.au
Address	Floor 3, 61 Mary Street, Brisbane 4000, QLD

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

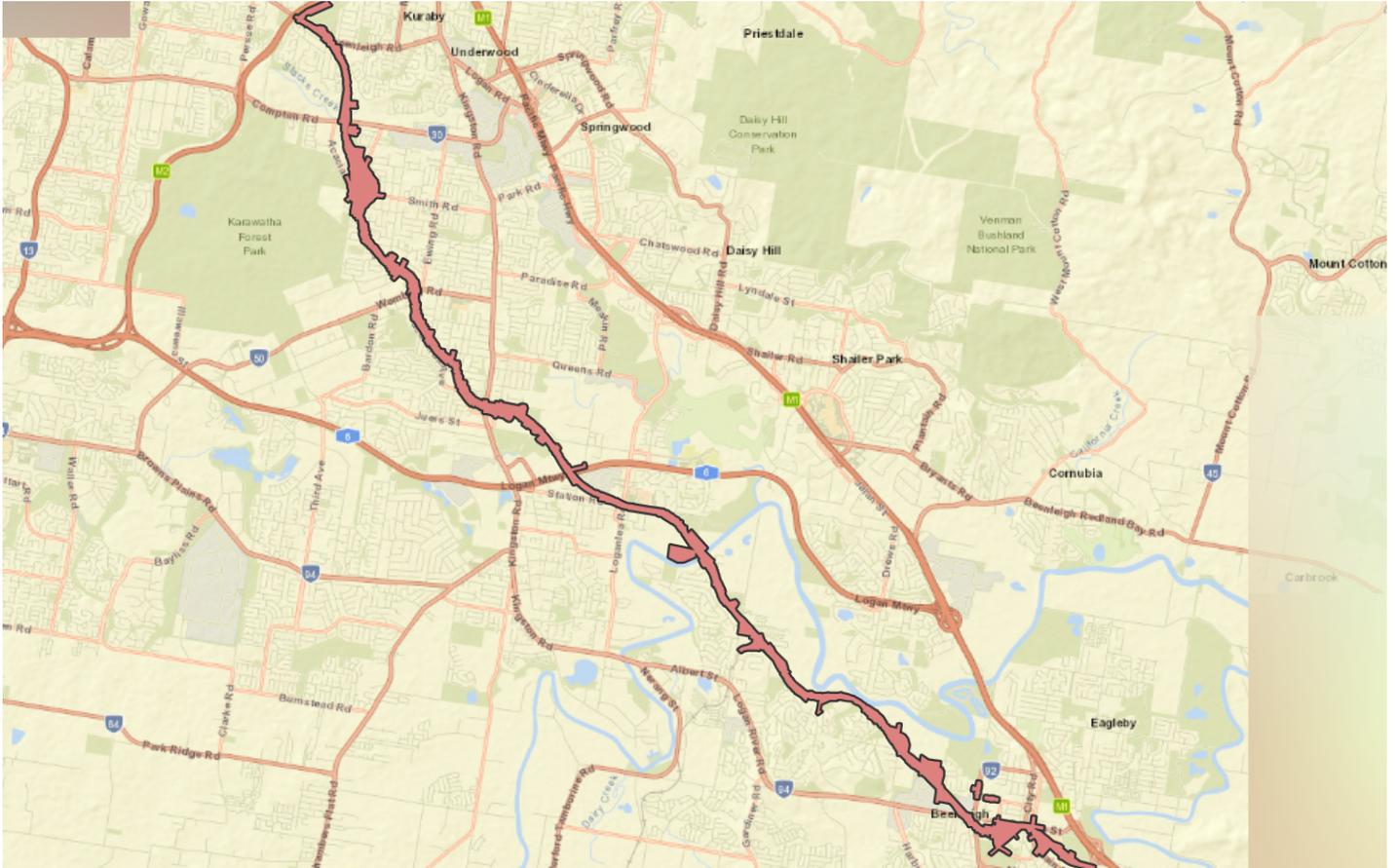
1.4 Payment details: Payment allocation

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



2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Approximately 1388A Beenleigh Rd, Kuraby QLD 4112 to 31 Wardell Cr, Beenleigh QLD 4207

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 Area extends over Brisbane City Council and Logan City Council local government areas, predominantly within an existing railway corridor. The existing railway corridor is zoned SP3 Special purpose (transport infrastructure) under the Brisbane City Plan 2014 and zoned Community facilities under the Logan Planning Scheme 2015. The wider study corridor is predominantly zoned as:

- Low density and medium density residential
- Low impact and medium impact industry
- Neighbourhood centre
- Sport and recreation
- Rural
- Emerging community
- Centre
- Environmental management and conservation
- Recreation and open space
- Mixed use.

A range of Lands Lease, Easement, Freehold and Reserve tenure is present in the Project Area.

The Project Area for the proposed action has been developed based on the reference design and includes allowance for future design progression as well as construction buffer and land use requirements (e.g. laydown areas). The design will be refined within the Project Area with consideration for potential impacts to environmental constraints including vegetation and habitat for threatened species and interaction with waterways.

With this in mind, the proposed action will require residential property acquisitions, by way of negotiation or resumption under the *Acquisition of Land Act 1967 (ALA)*, within the Project Area as it encroaches privately held residential allotments. TMR will continue to consult with property owners who may be subject to a partial or full land resumption as the design progresses.

3. Existing environment

3.1 Physical description

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

The Project Area is predominantly characterised by the existing rail corridor within an urban setting. Much of the existing land uses include previously cleared areas of rail corridor and traverses adjacent to residential housing, commercial and industrial districts. The Project Area encroaches privately held residential allotments. TMR will continue to consult with property owners who may be subject to a partial or full land resumption as the design progresses. The environmental values of these lots are typical of residential backyards.

The rail alignment traverses a series of undulating hills and low-lying riverine environments. Coastal areas lower than 5 m Australian Height Datum (AHD) are likely to have acid sulfate soils (ASS) present. The ground is generally low lying along the alignment, with areas between Kuraby and Trinder Park presenting key risk for ASS and watercourse crossings.

Areas of bushland are intersected, especially adjacent to the existing alignment at Scrubby Creek and Edens Landing and at the proposed straightening of the alignment through Trinder Park. These are described further in Section 3.2.

The existing rail alignment is associated with several lots on the Environmental Management Register (EMR) maintained by Department of Environment and Science (DES) QLD, pursuant to the *Environmental Protection Act 1994 (EP Act)*. Soils within these lots may be contaminated due to use of contaminated fill during previous construction activities and/or contamination due to historic and existing use as a rail corridor. Common contaminants of potential concern typically associated with rail operations include asbestos, pesticides, heavy metals and hydrocarbons. There is potential for other EMR listed properties to be impacted where TMR acquires land for the proposed action. When the design is further developed, any acquisitions that require further contaminated land investigation will be assessed and managed accordingly.

Construction traffic will make use of existing roads to access site offices, car parks and work sites along the project corridor. The project will be required to develop a construction traffic management plan which will prioritise the use of the highest road classification in each area. The construction traffic management plan will also detail requirements to ensure pedestrian/cyclist safety, and maintain access to private property and schools and clear paths for emergency vehicles. Upon completion of the works, it is anticipated that there will be no significant increase in the traffic through the project area. Minor changes to traffic routes on local roads are anticipated to accommodate the proposed design changes to facilitate better access around the station and precinct areas.

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

The Project Area is dictated by the need to duplicate the existing rail corridor between Kurraby and Beenleigh. The proposed land uses of the proposed project site is a duplication of the existing rail corridor between Kuraby and Beenleigh Station from two to four tracks, including associated station and rail system upgrades. The area is in the urban footprint under the South East Queensland Regional Plan 2017 and within a priority living area under the *Regional Planning Interest Act 2014*. The proposed action strategically supports these broader urban functions.

The Project Area extends over Brisbane City Council and Logan City Council local government areas, predominantly within an existing railway corridor. The existing railway corridor is zoned SP3 Special purpose (transport infrastructure) under the Brisbane City Plan 2014 and zoned Community facilities under the Logan Planning Scheme 2015. The wider study corridor is predominantly zoned as:

- Low density and medium density residential
- Low impact and medium impact industry
- Neighbourhood centre
- Sport and recreation
- Rural
- Emerging community
- Centre
- Environmental management and conservation
- Recreation and open space
- Mixed use.

A range of Lands Lease, Easement, Freehold and Reserve tenure is present in the Project Area.

Between chainage 23,000 m and 25,000 m a straightening of the rail alignment is proposed to improve efficiency of train movements through this section. To achieve this, the alignment is rerouted through Acacia Forest Park on the north-eastern corner of Karawatha Forest Park. Karawatha Forest is a Brisbane City reserve and is listed in the Register of the National Estate.

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

Between chainage 23,000 m and 25,000 m the proposed alignment is routed through Acacia Forest Park on the north-eastern corner of Karawatha Forest Park. Within Karawatha Park are the Karawatha Wetlands which are listed as a Nationally Important Wetland on the Directory of Important Wetlands in Australia. The proposed action does not intersect with any of the mapped wetlands within Karawatha Forest, with direct impacts limited to the north-eastern corner of the Park which has primarily been cut off from Karawatha by the existing Acacia Road. Acacia Forest Park itself does not have any outstanding natural features or unique values.

Additionally, the Project Area traverses the Logan River, which is the main waterway of the Logan Catchment, draining to Moreton Bay.

There are otherwise no outstanding natural features within 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 terrain within the Project Area is generally flat with some gently undulating areas in the southern extent. The ground is low lying with elevations generally between 10 m AHD and 50 m AHD. There are several waterway crossings which are lower than 5 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.

The Flora and Fauna setting of the Project Area is described in **Attachment C – Matters of National Environmental Significance Assessment Report**, Section 4.3, pages 17-21, and summarised as follows.

Most of the Project Area is dominated by the existing rail alignment and surrounding residential setting, with sparse foraging trees present in landscaped areas and residential backyards.

The Project Area traverses several key parks and areas of remnant vegetation including at Spring Creek and Slacks Creek (Chainage 22,000-23,500 m), Karawatha Forest (Chainage 24,000 m), Scrubby Creek (Chainage 29,500 m), Logan River (Chainage 33,000 m), Edens Landing (Chainage 35,500 to 37,000 m) and Hugh Muntz Park (Chainage 41,000 m). (**Attachment C – Matters of National Environmental Significance Assessment Report**, Figure 1-1, page 3)

Remnant, high value regrowth and regrowth vegetation communities have been identified in the Project Area through a combination of desktop and field assessment. They make up approximately 43 ha along the 20 km alignment and include Eucalyptus woodland to open forest, complex notophyll to microphyll vine forest and melaleuca, casuarina and eucalyptus open forest. Additionally the alignment crosses Spring Creek, Slacks Creek, Scrubby Creek and Logan River as well as 14 other minor waterways. Associated with the low-lying areas are swamps and estuarine habitat and non-remnant areas on the banks of waterways.

Despite the increasing urbanisation and development occurring within the region, mature patches of eucalypt woodlands are present in and adjacent to the Project Area. These areas support remnant eucalypt woodlands that reflect vegetation communities that were once widespread within the South East Queensland region. Where the Project Area extends along small order streams and ephemeral waterbodies, the fringing vegetation transitions from dry eucalypt woodlands into wet Melaleuca forests that dominated the temporarily inundated ecosystems. This habitat type was particularly dominant along Spring Creek and Scrubby Creek, and contained occasional patches of sedge, reeds and rushes.

Patches of these vegetation communities have been identified along road edges and in narrow corridors between residential areas, with many showing signs of impact (degradation) from anthropogenic pressures. Regardless, these areas still have potential to provide linking habitat for native fauna and facilitate fauna movement throughout the Project Area. Queensland Globe interactive mapping tools identify proximate biodiversity corridors. Biodiversity corridors are located within and adjacent to the Project Area especially at Spring Creek and Karawatha Forest, Scrubby Creek and adjacent to the Logan River.

Fauna communities that could be supported by these habitats include birds, reptiles, amphibians and mammals.

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

Remnant, high value regrowth and regrowth vegetation communities have been identified in the Project Area through a combination of desktop and field assessment. They make up approximately 43 ha along the 20 km alignment and include Eucalyptus woodland to open forest, complex notophyll to microphyll vine forest and melaleuca, casuarina and eucalyptus open forest. Additionally, the alignment crosses Spring Creek, Slacks Creek, Scrubby Creek and Logan River as well as 14 other minor waterways. Associated with the low-lying areas are swamps and estuarine habitat and non-remnant areas on the banks of waterways. The vegetation communities and corresponding RE descriptions are summarised in **Attachment C – Matters of National Environmental Significance Assessment Report**, Section 4.3, Table 8, pages 18-19.

Soil types within the Project Area include Chromosols, Demosols and Hydrosols. Much of the topsoil in the Project Area is would be previously disturbed by urbanisation, except soils associated with remnant vegetation.

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.

No Commonwealth heritage places are located in or adjacent to the Project Area.

Other places recognised as having heritage values are detailed below:

Queensland Heritage Register

One item listed on the Queensland Heritage Register (QHR) is located in the Project Area. Bethania Lutheran Church (QHR#600002) is located in the Project Area, 330 m south-east of Bethania Railway Station in lots 1 and 2 RP196081.

One item listed on the Queensland Heritage Register (QHR) is located 80 m north-west of the Project Area. Mayes Cottage (QHR#600662) is located 500 m north-west of Kingston Railway Station in lot 1253/SL8885 (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 2 of 2, Appendix 1, Figure 4d, Appendix 3).

Queensland National Trust Heritage Register

One item is listed on the Queensland National Trust Heritage Register in the Project Area. Bethania Lutheran Church (ID#LOG7/1), is located in the Project Area, 330 m south-east of Bethania Railway Station in lots 1 and 2 RP196081 (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 2 of 2, Appendix 3).

Local Heritage Register

The Project Area is located within the Logan City Council (LCC) and Brisbane City Council (BCC). There are 12 local heritage sites located in or directly adjacent the Project Area.

Seventeen items on the LCC local heritage register are located in and within 100 m of the Project Area (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, Appendix 1, Figure 4a-b; Part 2 of 2, Appendix 1, Figure 4c-e; Part 2 of 2, Appendix 3).

Three items on the BCC local heritage register are located in and within 100 m of the Project Area (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, pages 18-19).

Queensland Rail Register

Queensland Rail (QR) has identified one QR Registered historical place located in the Project Area. Bethania Passenger Station (QRHR#365) is located in the Project Area in lot 73/SP109403 in the south-central extent of the Project Area. The QR listing for this place is a good example of a second-class timber passenger station of the late 19th century (pre-WWII) and is significant as the original junction for the Beaudesert branch line. This QR heritage place is listed on the LHR register as Bethania Railway Station. (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, page 19).

Management Recommendations

Having regard to the above matters, and noting that there are no Commonwealth heritage places within, or adjacent to, the Project Area, the management recommendations for the above matters for the Project Area are provided for in **Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, Table 1, pages 5-15.

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

The Project Area is located on the land of the Jagera People #2 and Turrbal Association Inc, (in the northern extent of the Project Area) and Danggan Balun (Five Rivers) and Gold Coast Native Title Group, (in the central and southern extent of the Project Area).

A Cultural Heritage Risk Assessment has recently been completed (see **Attachment F** – Cultural Heritage Risk Assessment (CHRA), Parts 1 of 2 and 2 of 2).

Two DSDSATSIP sites are located in or within 100 m of the Project Area (**Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, Appendix 1, Figure 3c).

The proposed action is located in areas containing identified Indigenous cultural heritage sites, likely mature vegetation, high-risk landscape features, and causing additional ground disturbance. Consultation and survey prior to construction are required with the relevant Aboriginal Parties.

All management recommendations are provided in **Attachment F** – Cultural Heritage Risk Assessment (CHRA), Part 1 of 2, Table 1, pages 5-15.

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 hydrology characteristics that apply to the Project Area are described in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 4.5, pages 23-24.

The Project Area spans three catchment areas including Brisbane River, Logan River and Albert River. The majority of the Project Area lies within the Logan River Catchment within only northern and southern extremities within the Brisbane and Albert catchments respectively. Queensland Globe inland watercourse layer and watercourse identification map (WIM) identifies the known extent of watercourses and drainage features that are managed under the *Water Act 2000* (Water Act). The proposed action traverses numerous (17) water features including mapped watercourses, drainage lines and unmapped watercourses.

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	Yes	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. *

No World Heritage properties were identified by the Protected Matters Search Tool (PMST) within 10 km of the Project Area.

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. *

No National Heritage Places were identified by the PMST within 10 km of the Project Area.

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.

Direct impact	Indirect impact	Ramsar wetland
No	Yes	Moreton Bay

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

Yes

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

The Project Area is 10-20 km upstream from the Moreton Bay Ramsar site according to the PMST. The Project Area is not in the Moreton Bay Ramsar site and will not cause direct impacts to the wetland values. Given the distance of the Project Area from the Moreton Bay Ramsar site, potential pathways for indirect impacts to the Ramsar site are limited to possible changes to flow regimes from widening or duplicating assets in the Logan River and its tributaries and potential downstream water quality impact during construction, however these are not expected to be significant, as assessed in **Attachment C** – Matters of National Environmental Significance Report, Section 7.1.3, pages 40-41.

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

No

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

A significant impact assessment for Moreton Bay Ramsar site is presented in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 7.1.3, Table 11, pages 40-41.

The Project Area is 10-20 km upstream from the Moreton Bay Ramsar site according to the PMST. The Project Area is not in the Moreton Bay Ramsar site and will not cause direct impacts to the wetland values including destruction of substantial modification, establishment or spread of invasive species in the wetland.

It is considered unlikely any proposed action activities would result in indirect impacts that may significantly impact the values of the Moreton Bay Ramsar wetland. As part of the reference design refinement process, hydraulic modelling will be undertaken to inform design recommendations to ensure that this occurs. Management and mitigation for downstream water quality impacts are summarised below.

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

No

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

The proposed action is not anticipated to have a significant impact on a Ramsar Wetland and as such this is not expected to be a controlling provision of the action.

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

It is anticipated that potential downstream water quality impacts can be managed and mitigated through further detailed investigations of hydrology, contaminated land and acid sulfate soils staged to be complete in subsequent design phases.

Widening or duplication of rail assets over waterways will potentially result in impacts to the affected waterways, including changes to the flow regime and the creation of flood afflux. As part of the reference design refinement process, hydraulic modelling is being undertaken to inform design recommendations around permanent water treatment devices and design infrastructure within various waterways.

Potential indirect impacts associated with these activities such as sedimentation or contaminant movement will be actively managed via the Environmental Management Plan – Construction (EMP(C)) (can be provided to the Department upon request) to ensure impacts to adjacent areas and waterways are minimal. This will include best practice erosion, stormwater and sediment control and designated banded areas for construction materials and refuelling activities.

Detailed investigations will be undertaken within the Project Area which will identify potential contaminants within the surface soil. The potential environmental risks associated with contaminant release and mobilisation will be informed by detailed investigations to effectively manage potential contaminants during all phases of the proposed action.

ASS is considered a known risk within the Project Area. Sufficient mitigation and management measures relevant to ASS are available to ensure future risks can be managed.

Excavated contaminated materials will be disposed of appropriately at an authorised offsite location, and stockpiles will be managed in accordance with the EMP(C).

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

There are no proposed offsets relevant to this matter.

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
Yes	Yes	Anthochaera phrygia
No	No	Argynnis hyperbius inconstans
Yes	Yes	Arthraxon hispidus
No	No	Baloghia marmorata
Yes	Yes	Bosistoa transversa
Yes	Yes	Botaurus poiciloptilus
Yes	Yes	Calidris ferruginea

Direct impact	Indirect impact	Species
Yes	Yes	<i>Calyptorhynchus lathamii</i>
No	No	<i>Calyptorhynchus lathamii lathamii</i>
No	No	<i>Caretta caretta</i>
No	No	<i>Chalinolobus dwyeri</i>
No	No	<i>Charadrius leschenaultii</i>
No	No	<i>Chelonia mydas</i>
No	No	<i>Coeranoscincus reticulatus</i>
Yes	Yes	<i>Coleus habrophyllus</i>
No	No	<i>Corchorus cunninghamii</i>
No	No	<i>Cryptocarya foetida</i>
No	No	<i>Cryptostylis hunteriana</i>
No	No	<i>Cupaniopsis shirleyana</i>
No	No	<i>Cyclopsitta diophthalma coxeni</i>
Yes	Yes	<i>Dasyurus maculatus maculatus</i> (SE mainland population)
No	No	<i>Delma torquata</i>
No	No	<i>Dermochelys coriacea</i>
No	No	<i>Diomedea antipodensis</i>
No	No	<i>Diomedea antipodensis gibsoni</i>
No	No	<i>Diomedea exulans</i>
No	No	<i>Diploglottis campbellii</i>
No	No	<i>Endiandra floydii</i>
No	No	<i>Epinephelus daemeli</i>
No	No	<i>Eretmochelys imbricata</i>
No	No	<i>Erythroriorchis radiatus</i>
No	No	<i>Falco hypoleucos</i>
No	No	<i>Fontainea venosa</i>
No	No	<i>Furina dunmalli</i>
No	No	<i>Geophaps scripta scripta</i>
Yes	Yes	<i>Gossia gonoclada</i>
Yes	Yes	<i>Grantiella picta</i>
No	No	<i>Hemiaspis damelii</i>
Yes	Yes	<i>Hirundapus caudacutus</i>
Yes	Yes	<i>Lathamus discolor</i>
No	No	<i>Lepidochelys olivacea</i>
No	No	<i>Limosa lapponica baueri</i>

Direct impact	Indirect impact	Species
Yes	Yes	<i>Macadamia integrifolia</i>
No	No	<i>Macadamia tetraphylla</i>
No	No	<i>Maccullochella mariensis</i>
No	No	<i>Macroderma gigas</i>
No	No	<i>Macronectes giganteus</i>
No	No	<i>Macronectes halli</i>
No	No	<i>Mixophyes fleayi</i>
No	No	<i>Natator depressus</i>
No	No	<i>Notelaea ipsviciensis</i>
No	No	<i>Numenius madagascariensis</i>
No	No	<i>Pachyptila turtur subantarctica</i>
Yes	Yes	<i>Persicaria elatior</i>
No	No	<i>Petauroides volans</i>
Yes	Yes	<i>Petauroides volans (southern and central)</i>
Yes	Yes	<i>Petaurus australis australis</i>
No	No	<i>Phaius australis</i>
Yes	Yes	<i>Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</i>
No	No	<i>Planchonella eerwah</i>
No	No	<i>Plectranthus habrophyllus</i>
Yes	Yes	<i>Potorous tridactylus tridactylus</i>
No	No	<i>Pseudomys novaehollandiae</i>
Yes	Yes	<i>Pteropus poliocephalus</i>
Yes	Yes	<i>Rhodamnia rubescens</i>
Yes	Yes	<i>Rhodomyrtus psidioides</i>
No	No	<i>Rostratula australis</i>
Yes	Yes	<i>Rostratula benghalensis australis</i>
No	No	<i>Samadera bidwillii</i>
No	No	<i>Sphyrna lewini</i>
No	No	<i>Sternula nereis nereis</i>
Yes	Yes	<i>Tachyglossus aculeatus</i>
No	No	<i>Thalassarche cauta</i>
No	No	<i>Thalassarche impavida</i>
No	No	<i>Thalassarche melanophris</i>
No	No	<i>Thalassarche salvini</i>
No	No	<i>Thalassarche steadi</i>

Direct impact	Indirect impact	Species
No	No	Thesium australe
No	No	Thunnus maccoyii
No	No	Turnix melanogaster
No	No	Vincetoxicum woollsii
No	No	Xeromys myoides

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Coastal Swamp Oak (<i>Casuarina glauca</i>) 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	Poplar Box Grassy Woodland on Alluvial Plains
No	No	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

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 potential direct and indirect impacts from the proposed action are described in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 5.0, pages 25-34, and summarised below.

Direct impacts from construction phase are likely to include:

- Vegetation clearing and habitat loss
- Loss or alteration of conservation significant fauna habitat
- Loss or alteration of conservation significant flora habitat
- Habitat fragmentation
- Injury and mortality of fauna

Indirect impacts from construction phase are likely to include:

- Impacts to waterways
- Weed species and plant diseases
- Pest fauna species
- Noise and vibration
- Light
- Dust

Potential impacts of the Project Area considered for ecological MNES either identified within the Project Area or assessed as potentially present. The PMST identified seven threatened ecological communities, 28 threatened flora species and 57 threatened fauna species as known, likely or having potential to occur within the Project Area. Of these, field verification and likelihood of occurrence assessment indicated two threatened ecological communities, eight plants, six mammals and eight birds as known or having potential to occur within the disturbance footprint.

Threatened Ecological Communities

Field verification confirmed no threatened ecological community is present within the Project Area, and no direct or indirect impacts are anticipated from the proposed action.

Threatened Flora

While potential suitable habitat for Scrub turpentine (*Rhodamnia rubescens*), Native guava (*Rhodomyrtus psidiodes*), Angle-stemmed myrtle (*Gossia gonoclada*), *Coleus habrophyllus*, Tall knotweed (*Persicaria elatior*), Hairy-joint grass (*Arthraxon hispidus*) and Three-leaved bosistoa (*Bosistoa traversa*) was identified in the Project Area, none of the species were recorded within the Project Area during the flora

surveys. Further targeted surveys are required to confirm their presence and whether direct or indirect impacts to these species will result from the proposed action.

The potential habitat areas within the Project Area for these species is not contiguous, occurring in patches along the 20 km alignment. The Project Area is predominantly adjacent to existing rail, road or urban features and the potential habitat identified is subject to existing threats associated with the urban environment and weed incursion. In addition, none of these species were recorded within the Project Area during the flora survey. On this basis, it is considered unlikely that specimens (if present) of listed threatened species will be identified in the full extent of potentially suitable habitat within the Project Area. MNES listed flora were assessed through the risk assessment and were identified as low risk and therefore a SIA has not been completed, however the requirement to complete an SIA for these species will be revisited once targeted survey is available.

Threatened Fauna

Of the six mammals and eight birds known, likely and potentially occurring within the Project Area, a two-step significant impact assessment process was applied. The screening assessment identified the Koala (*Phascolarctos cinereus*), Grey-headed flying fox (*Pteropus poliocephalus*) and Greater glider (*Petauroides volans sensu lato*) as requiring further assessment for potential risk of significant impacts. Other potentially occurring threatened and migratory species are considered to have a low risk of significant impact as defined under the EPBC Act Policy Statement 1.1 Significant Impact Guidelines: Matters of National Environmental Significance (Department of the Environment, 2013a), due to the combination of factors:

- Project Area lacking habitat critical for the survival or important habitat for the species
- Inability of the Project Area to support an important population or ecologically significant proportion of a population.

Threatened species may use the Project Area for opportunistic seasonal foraging and dispersal; however, the available habitat in the urban context lacks condition and connectivity, and more suitable foraging and dispersal habitat is available in the region. Only the vulnerable Glossy Black Cockatoo (*Calyptorhynchus lathami lathami*) is known to use the Project Area for breeding, foraging and as a dispersal pathway; however, preferred hollow tree species were not recorded during field surveys so the breeding habitat is not critical to survival of the species. The linear nature of the disturbance and of the existing urbanisation in the surrounding area suggest the proposed action will not result in habitat fragmentation in the context of threatened species such as Spotted-tail quoll (*Dasyurus maculatus maculatus*), Yellow-bellied glider (*Petaurus australis australis*), long-nosed potoroo (*Potorous tridactylus tridactylus*), Painted Honeyeater (*Grantiella picta*), White-throated needletail (*Hirundapus caudacutus*), Regent honeyeater (*Anthochaera phrygia*), Swift parrot (*Lathamus discolor*), Curlew sandpiper (*Calidris ferruginea*), Australasian bittern (*Botaurus poiciloptilus*), Australian Painted Snipe (*Rostratula australis*); however, it may result in loss of future hollow-bearing trees and food trees. During construction, threats other than vegetation clearing will be comparable to the existing urban environment and rail corridor, and managed through the EMP(C) developed as part of the proposed action.

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. *

The significant impact assessment is presented in **Attachment C – Matters of National Environmental Significance Assessment Report**, Appendix A, pages 22-41, and summarised in **Attachment C – Matters of National Environmental Significance Assessment Report**, Section 7.1.4, pages 41-44.

The koala, grey-headed flying fox and greater glider were identified as having a potential risk of significant impact under the detailed significant impact criteria outlined in the EPBC Act Policy Statement 1.1 Significant Impact Guidelines: Matters of National Environmental Significance (Department of the Environment, 2013a). Key aspects of this assessment are captured as follows:

Koala – possible significant impact

Habitat within the Project Area has potential to meet essential life cycle requirements of the koala (foraging and dispersal) and is considered habitat critical to survival of the species as defined under the Conservation Advice (DAWE 2022). The Project Area has been refined, however, direct impacts include loss of foraging habitat (up to 40.9 ha) and low-quality dispersal and sheltering habitat (up to 161.3 ha). Given the urban context, koalas rely on small patches of vegetation and, as such, there is a possibility of significant impact due to loss of foraging habitat.

Grey-headed flying fox – possible significant impact

Vulnerable grey-headed flying fox may use the Project Area sporadically to forage when seasonal conditions are suitable. Habitat within the Project Area largely comprises remnant and non-remnant vegetation containing identified grey-headed flying fox forage species. The National Recovery Plan for the Grey Headed Flying Fox (Commonwealth of Australia 2021) defines habitat critical to the survival of the species. While it is recognised that the vegetation is low-quality, the vegetation meets the definition of habitat critical to the survival of the species since it contains important winter and spring flowering vegetation communities, and there are three nationally important camps as identified within 20 km of the Project Area (Commonwealth of Australia 2021). The total area of impact to habitat critical to the survival of the grey-headed flying-fox is calculated as 11.4 ha of suitable roosting and foraging habitat, and 196.6 ha of habitat suitable for foraging only. The proposed action will directly impact these areas as a result of vegetation clearing. As the proposed action is expected to impact on native foraging habitat critical to the survival of the grey-headed flying-fox, the proposed action could be considered to interfere with the recovery of the species.

Greater glider – possible significant impact

The endangered greater glider is known to occur within the Project Area based on recent records within 1 km of the Project Area; however, utilisation by this species is likely to be minimal and for short periods of rest, dispersal and foraging. Given its endangered status and limited dispersal capabilities, populations of the greater glider are considered important for the conservation of the species as per the Conservation Advice for Petauroides volans (greater glider (southern and central)) (Department of Climate Change Energy the Environment and Water 2022a); as such, any individuals present within the Project Area are considered an important population.

The highly urbanised nature of the environment lacks connectivity for dispersal, provides sparse potential foraging resources in eucalypt dominated forests and marginal breeding habitat based on the scarcity of mature trees suitable for denning. Forest areas currently unoccupied by the greater glider may still represent habitat critical to survival if the recruitment of hollow-bearing trees as the forest ages could allow the species to colonise these areas and ensure persistence of a subpopulation. As habitat trees present may facilitate activities such as foraging, breeding and denning, all potential habitat is considered habitat critical to the survival of the species as defined under the Conservation Advice (Department of Climate Change Energy the Environment and Water 2022a). Vegetation clearing will directly impact 41.8 ha of suitable habitat, including 36.3 ha of denning habitat, 4.6 ha of foraging habitat and 0.9 ha of dispersal habitat. Tree hollows are required for this species to breed, and potential breeding habitat will be directly impacted (a total area of 27.27 ha); the reduction in suitable hollow-bearing trees available for the species in the local area may result in the disruption of the breeding cycle of an important population.

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. *

Given the potential for a significant impact to Koala, Grey-headed flying fox, and Greater glider, it is anticipated the proposed action would be a controlled action for potential impacts on listed threatened species.

The significant impact assessment is presented in **Attachment C** – Matters of National Environmental Significance Assessment Report, Appendix A, pages 22-41, and summarised in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 7.1.4, page 41-44.

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. *

A summary of measures proposed to avoid or mitigate potential impacts to threatened species is included in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 6.0, pages 36-41.

The proposed action is currently at reference design phase. The following actions have been undertaken to avoid, minimise, mitigate and offset impacts to MNES where possible:

- Targeted flora and fauna ecological investigations have been undertaken to ground-truth areas of mapped habitat and guide the design refinement process.
- Design optioneering has incorporated environmental assessment to inform selection of preferred options.

Specific design responses achieved through the processes outlined above has resulted in the following inclusions in the reference design for the subsequent design and construction phase of the proposed action:

- Fauna exclusion fencing has been proposed along the alignment of the proposed action in identified high value habitat areas to guide and funnel fauna to proposed fauna movement infrastructure
- Fauna exclusion fencing and fauna movement infrastructure will be designed to accommodate target fauna species based on ecological investigations within high value habitat areas adjacent to the alignment of the proposed action. Some design considerations include (but are not limited to):
 - Infrastructure vertical alignments and subsequent sizing of movement infrastructure.
 - The type of infrastructure that currently exists (eg. will the infrastructure upgrade require extension of culverts or duplication of a bridge).
 - Whether movement infrastructure is best placed over or under transport infrastructure.
 - The presence of biodiversity corridors and existing fragmentation in the landscape.
 - Whether the movement infrastructure is dedicated or serves a dual function for drainage.
- Park and ride facilities have been relocated east of the proposed rail alignment at Trinder Park to take advantage of areas which would otherwise be severed from Acacia Forest Park and ultimately serves to reduce fragmentation of mapped koala habitat caused by the proposed action.

- A retaining wall structure has been included adjacent to Edens Landing to minimise additional clearing of habitat, including marine plants, and subsequent impacts to water quality through decreased stability to riparian areas.

Design and construction mitigation responses to environmental risks will be developed further through detailed design and recorded in the Environmental Design Report (EDR) (can be provided to the Department upon request). The EDR will detail tangible design responses to the potential risks and mitigation strategies identified within the proposed action's environmental assessment(s) (Review of Environmental Factors) and ensure they are carried through to construction.

Any residual risks linked to the construction phase will be managed through the development of an EMP(C) (can be provided to the Department upon request) by the construction contractor. The EMP(C) must be submitted to and deemed suitable by TMR prior to the commencement of any ground disturbance works.

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

TMR is committed to reducing potential impacts on protected matters through avoidance and mitigation measures with offsets employed as a secondary measure to ameliorate residual impacts.

An Offset Strategy is being developed to address Commonwealth and State offset policies, guidance, recovery plans and conservation advice. The proposed action is seeking to secure and manage direct land-based offsets to compensate for significant residual impacts. The areas of offsetting will be determined using Commonwealth Offset Assessment Guide.

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
Yes	Yes	Actitis hypoleucos
Yes	Yes	Apus pacificus
No	No	Ardenna grisea
Yes	No	Calidris acuminata
Yes	No	Calidris ferruginea
Yes	Yes	Calidris melanotos
No	No	Calonectris leucomelas
No	No	Caretta caretta
No	No	Charadrius leschenaultii
No	No	Chelonia mydas
Yes	Yes	Cuculus optatus
No	No	Dermochelys coriacea
No	No	Diomedea antipodensis
No	No	Diomedea exulans
No	No	Eretmochelys imbricata

Direct impact	Indirect impact	Species
Yes	Yes	Gallinago hardwickii
Yes	No	Hirundapus caudacutus
No	No	Lamna nasus
No	No	Lepidochelys olivacea
No	No	Limnodromus semipalmatus
No	No	Limosa lapponica
No	No	Macronectes giganteus
No	No	Macronectes halli
No	No	Mobula alfredi
No	No	Mobula birostris
Yes	Yes	Monarcha melanopsis
Yes	No	Monarcha trivirgatus
Yes	No	Myiagra cyanoleuca
No	No	Natator depressus
No	No	Numenius madagascariensis
Yes	Yes	Pandion haliaetus
No	No	Phaethon lepturus
Yes	Yes	Plegadis falcinellus
Yes	No	Rhipidura rufifrons
No	No	Symposiachrus trivirgatus
No	No	Thalassarche cauta
No	No	Thalassarche impavida
No	No	Thalassarche melanophris
No	No	Thalassarche salvini
No	No	Thalassarche steadi
Yes	Yes	Tringa nebularia
Yes	Yes	Tringa stagnatilis

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 potential direct and indirect impact from the proposed action are described in **Attachment C** – Matters of National Environmental Significance Assessment Report, Section 5.0, pages 25-34, and summarised below.

Potential impacts of the Project Area considered for ecological MNES either identified within the Project Area or assessed as potentially present. Of the 21 listed migratory species identified in the PMST, 14 are known, likely or have potential to occur within the Project Area.

Of the listed migratory species known, likely or having potential to occur within the Project Area, the nature and extent of direct impacts to habitat include:

- 0.2 ha of foraging and dispersal habitat for Black-faced monarch (*Monarcha melanopsis*) and Spectacled monarch (*Monarcha trivirgatus* syn. *Symposiachrus trivirgatus*)
- 0.7 ha of foraging and dispersal habitat for Osprey (*Pandion haliaetus*)
- 13.2 ha of foraging and dispersal habitat for Sharp-tailed sandpiper (*Calidris acuminata*), Common sandpiper (*Actitis hypoleucos*) and Pectoral sandpiper (*Calidris melanotos*)
- 6.6 ha of foraging and dispersal habitat for Curlew sandpiper (*Calidris ferruginea*), Glossy ibis (*Plegadis falcinellus*), Common greenshank (*Tringa nebularia*), Marsh sandpiper (*Tringa stagnatilis*) and Latham's snipe (*Gallinago hardwickii*)
- 36.3 ha of foraging and dispersal habitat for Rufous fantail (*Rhipidura rufifrons*)
- 41.1 ha of foraging and dispersal habitat for Oriental cuckoo (*Cuculus optatus*) and Satin flycatcher (*Myiagra cyanoleuca*)
- 208.8 ha of foraging and dispersal habitat for Fork-tailed swift (*Apus pacificus*)
- 208.8 ha of foraging, dispersal and marginal roosting habitat for White-throated needletail (*Hirundapus caudacutus*).

During construction, threats other than vegetation clearing are anticipated to be comparable to the existing urban environment and rail corridor. Potential threats from construction activities will be appropriately managed through the EMP(C) to be developed as part of the proposed action.

These species are highly mobile and unlikely to be sensitive to potential indirect impacts associated with the proposed action.

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. *

Listed migratory species were screened for potential significant impacts **Attachment C – Matters of National Environmental Significance Assessment Report**, Appendix A, pages 16-21. As summarised in **Attachment C – Matters of National Environmental Significance Assessment Report**, Section 7.1.5, pages 44-45. Migratory species are considered to have a low risk of significant impact as defined under the EPBC Act Policy Statement 1.1 Significant Impact Guidelines: Matters of National Environmental Significance (Department of the Environment, 2013a).

The Project Area offers potential suitable foraging and dispersal habitat within the migration range for a small number of individuals in the airspace above the wooded areas, and vegetation near wetlands and waterways. Migratory species will not breed in this habitat and the habitat does not provide unique features or areas important for the survival of the listed migratory species.

Direct impacts via vegetation clearing are unlikely to impact these species. The linear nature of the disturbance and the existing disturbances in the surrounding area suggest the proposed action will not result in habitat fragmentation for migratory species. The proposed action is unlikely to exacerbate threats to the species, as many threats already occur within the region. This species is highly mobile and unlikely to be sensitive to potential indirect impacts associated with the proposed action due to the existing presence of pests and weeds.

The extent of habitat present within the Project Area does not meet the thresholds suggested to lead to a significant impact to migratory species. Further, it is unlikely that this habitat supports an ecologically significant proportion of a migratory population.

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. *

The proposed action is not anticipated to have a significant impact on Migratory Species and as such this is not expected to be a controlling provision of the action.

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. *

A summary of measures proposed to avoid or mitigate potential impacts to species is included in Attachment C – Matters of National Environmental Significance Assessment Report, Section 6.0, pages 36-41.

The proposed action is currently at reference design phase. The following actions have been undertaken to avoid, minimise, mitigate and offset impacts to MNES where possible:

- Targeted flora and fauna ecological investigations have been undertaken to ground-truth areas of mapped habitat and guide the design refinement process.
- Design optioneering has incorporated environmental assessment to inform selection of preferred options.

Design and construction mitigation responses to environmental risks will be developed further through detailed design and recorded in the Environmental Design Report (EDR) (can be provided to the Department upon request). The EDR will detail tangible design responses to the potential risks and mitigation strategies identified within the proposed action's environmental assessment(s) (Review of Environmental Factors) and ensure they are carried through to construction.

Any residual risks linked to the construction phase will be managed through the development of an EMP(C) (can be provided to the Department upon request) by the construction contractor. The EMP(C) must be submitted to and deemed suitable by TMR prior to the commencement of any ground disturbance works.

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

There are no proposed offsets relevant to this matter.

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. *

None of the activities associated with the proposed action could be considered a nuclear action as defined in Section 22 of the EPBC Act.

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 PMST did not identify any Commonwealth Marine Areas within 10 km of the Project Area.

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 Great Barrier Reef Marine Park (GBRMP) covers an area of 348,000 km² and is located off the coast of Queensland. The Project Area is roughly 16 km inland and 350 km from the southern extent of the GBRMP and therefore, it is unlikely to have any impacts on the GBRMP.

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. *

This action does not consist of coal seam gas development or large coal mining development.

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 PMST identified four areas of Commonwealth Land within 10 km of the Project Area. They relate to Defence Training Areas and Depots, Annerley Training Depot [30237], Greenbank Training Area [31014], Moorooka Training Depot [31030], and Moorooka Training Depot [31029]. The Project Area does not intersect or impact these areas.

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 located 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 proposed action relates to the duplication of approximately 20 km of rail corridor and upgrades to associated rail infrastructure between Kuraby and Beenleigh. The location of the proposed action is tied to the existing rail alignment for the majority of the Project Area. The exception to this is at Woodridge where track straightening is required to improve train speeds and connectivity to the rail network (see **Attachment G** – Alternatives Figures, Figures 1-3, pages 1-2). As part of this realignment, the Trinder Park station will be shifted from the existing station precinct to a site 1.2 km north. The new station will be more centrally located between the two nearest stations (Kuraby and Woodridge).

The bend near the Trinder Park station is one of the tightest curves on the SEQ rail network which significantly constrains train speeds and as a result, also generates significant noise for adjacent residents, due to wheel squeal as the trains travel around the sharp radius curve. An assessment of potential options for this location was completed as part of an earlier planning stage. This study took into account the environmental impacts of realigning the rail corridor, but concluded that realignment of the rail corridor at this location is necessary to

address the current constraints on rail-line speed, improve rail standards compliance and ultimately achieve the required outcomes for the transport network. By realigning the rail corridor here, there are also fewer impacts on residential properties (compared with widening the existing corridor) and the relocated station provides improved accessibility and connectivity to the surrounding precinct.

The relocation of Trinder Park Station will intersect Acacia Forest Park, which forms part of Karawatha Forest Park, an ecologically sensitive area. This is the only part of the rail alignment which is located within greenfield. During the design refinement stage, alternative options have been investigated for the park 'n' ride facility for this station to further minimise impacts on vegetation and koala habitat. Following design and stakeholder input, positioning the park 'n' ride on the eastern side was identified as the preferred option. It would result in less habitat fragmentation (compared to being located on the western side of the station); would be closer to residential areas, and would provide improved accessibility for private vehicles and improved serviceability for buses as the main residential catchment is located to the east of the rail corridor. The design footprint could also be reduced by a further ten percent at this location with negligible difference in terms of cost and construction. This would result in less vegetation impact.

For the 20 km duplication of the rail corridor, the design will continue to be refined within the Project Area with consideration for potential impacts to environmental constraints including vegetation and habitat for threatened species and interaction with waterways. As the Project Area encroaches on privately held residential allotments, the requirement for land acquisition within the Project Area is being progressed concurrently with this referral. TMR will continue to consult with property owners who may be subject to a partial or full land resumption as the design progresses.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

#1.	Attachment A - Proposed action additional information	Document	Additional information to describe the proposed action.
#2.	Attachment B Additional Works	Document	Additional information to describe additional works.

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

1.2.7 Public consultation regarding the project area

#1.	Attachment D - Logan Gold Coast Faster Rail Update – Feb 2022	Document	Published project update
#2.	Attachment E – Logan Gold Coast Faster Rail Project Update – Sept 2022.	Document	Published project update
#3.	Have your say - Logan and Gold Coast Faster Rail	Link (Webpage)	https://www.yoursay-projects.tmr.qld.gov.au/logan-and-gold-coast-faster-rail
#4.	Logan and Gold Coast Faster Rail	Link (Webpage)	https://www.tmr.qld.gov.au/projects/logan-and-gold-coast-faster-rail

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

#1.	Environmental management	Link (Webpage)	http://www.tmr.qld.gov.au/Community-and-environment/Environmental-management
#2.	Environmental Processes Manual	Link (Webpage)	https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Environmental-processes-manual
#3.	Environmental Sustainability Policy	Link (Webpage)	https://www.tmr.qld.gov.au/-/media/communityandenvironment/Management/Environmental-sustainability-policy/Environmental-Sustainability-Policy.pdf?la=en

3.2.1 Flora and fauna within the affected area

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

3.2.2 Vegetation within the project area

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

3.3.1 Commonwealth heritage places overseas or other places that apply to the project area

#1.	Attachment F - Cultural Heritage Risk Assessment (CHRA)	Document	Cultural Heritage Risk Assessment for Project
-----	---	----------	---

3.3.2 Indigenous heritage values that apply to the project area

#1.	Attachment F - Cultural Heritage Risk Assessment (CHRA)	Document	Cultural Heritage Risk Assessment for Project
-----	---	----------	---

3.4.1 Hydrology characteristics that apply to the project area

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

4.1.3.2 (Ramsar Wetland) Why your action has a direct and/or indirect impact on the identified protected matters

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

4.1.3.6 (Ramsar Wetland) Why you do not consider the direct and/or indirect impact to be a Significant Impact

#1.			
-----	--	--	--

Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
--	----------	---

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

#1. Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
--	----------	---

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

#1. Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
#2. Conservation Advice for Petauroides volans	Link (Webpage)	https://www.environment.gov.au/biodiversity/threatened/species/p/conservation-advice-05072022.pdf
#3. Conservation Advice for Phascolarctos cinereus (Koala)	Link (Webpage)	http://www.environment.gov.au/biodiversity/threatened/species/p/conservation-advice-12022022.pdf
#4. National Recovery Plan for the Grey-headed Flying-fox	Link (Webpage)	https://www.dcceew.gov.au/sites/default/files/documents/recovery-plan-grey-headed-flying-fox.pdf
#5. Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999	Link (Webpage)	https://www.dcceew.gov.au/sites/default/files/documents/nsg-guidelines_1.pdf

4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

#1. Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
--	----------	---

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

#1. Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
--	----------	---

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

#1. Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
--	----------	---

Significance Assessment Report

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

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

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

#1.	Attachment C –Matters of National Environmental Significance Assessment Report	Document	Assessment of potential impact to MNES.
-----	--	----------	---

4.3.8 Why alternatives for your proposed action were not possible

#1.	Attachment G – Alternatives figures	Document	Figures to support alternatives discussion
-----	-------------------------------------	----------	--

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia
Representative's name	Jared Brook
Representative's job title	Principal Environmental Consultant
Phone	0431822333
Email	jared.brook@aecom.com
Address	Level 8, 540 Wickham Street, Fortitude Valley QLD 4006, Australia

- Check this box to indicate you have read the referral form. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *
- By checking this box, I, **Jared Brook of AECOM AUSTRALIA 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. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *

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	Floor 3, 61 Mary Street, Brisbane 4000, QLD
Representative's name	Lynnell Davis
Representative's job title	Principal Environmental Officer
Phone	07 3066 3630
Email	lynnell.w.davis@tmr.qld.gov.au
Address	Floor 3, 61 Mary Street, Brisbane 4000, QLD

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

I would like to receive notifications and track the referral progress through the EPBC portal. *

I, **Lynnell Davis 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. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

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. *

I would like to receive notifications and track the referral progress through the EPBC portal. *

I, **Lynnell Davis 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. *

I would like to receive notifications and track the referral progress through the EPBC portal. *