

EPBC Act referral



Australian Government

Department of Agriculture, Water and the Environment

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Title of proposal	2020/8646 - Stage 1 Coomera Connector
Section 1	
Summary of your proposed action	
1.1 Project industry type	Transport - Land
1.2 Provide a detailed description of the proposed action, including all proposed activities	
The Australian and Queensland Government are committed to ensuring the efficiency and safety of the M1 Pacific Motorway (M1) as a key component of the National Land Transport Network. The M1 is the highest-trafficked road in Queensland and is an enabling link for long distance traffic (freight, tourism, commercial and commuter) between economic hubs on the east coast of Queensland and New South Wales. The lack of capacity on the road network between Brisbane and the Gold Coast was highlighted as a problem in the Infrastructure Australia Audit. The 2015 Audit identified the M3/M1 Pacific Motorway in the top ten road corridors with the highest projected delay cost by 2031 nationally, and the section from Beenleigh to Helensvale as the third largest projected delay cost in the corridor in Queensland in 2031. The 2019 Audit projected the cost of congestion for the Brisbane, Gold Coast and Sunshine Coast area to increase to over \$9 billion by 2031. The Brisbane to Gold Coast corridor has been, and will continue to be, one of the fastest growing areas in Australia. The cities of Logan and Gold Coast will continue to experience high rates of residential growth, while the city of Brisbane will have the highest growth in employment in Queensland – thereby being an important source of employment for commuting residents in Logan and on the Gold Coast. More than 600,000 additional people are expected to move to Logan and the Gold Coast by 2041 (ShapingSEQ). The population around the areas of Yatala, Ormeau, Pimpama, Upper Coomera and Coomera is predicted to increase at an average growth rate of 5.7 per cent per year till 2036 (QGSO). This is greater than the predicted average growth rate for Queensland of 1.7 per cent per year over the same period. The M1 is the only major north-south road connection in the corridor, which means that this population increase will result in larger volumes on the M1 with increased congestion. This is compounded by having no viable alternative route in the corridor and a high reliance on private vehicle use. To meet the future transport task and to provide additional north-south connectivity for key growth areas on the northern Gold Coast, the Coomera Connector corridor was identified and has been progressively gazetted as a future State-controlled road between March 2016 and March 2019. The Coomera Connector is a 47 kilometre long transport corridor located to the east of the M1 from the Pacific Motorway/Logan Motorway interchange at Loganholme to Nerang-Broadbeach Road in Nerang. The corridor is capable of accommodating up to six traffic lanes with public and active transport provision. Planning and acquisition of land for the Coomera Connector commenced in the 1990s and the corridor has been included in various public documents since this time, including published street directories, regional plans, planning studies and City of Gold Coast planning schemes. DTMR commenced development of a Preliminary Evaluation for the M1 Pacific Motorway Loganholme to Nerang and Coomera Connector, which included a detailed options assessment process, following approval of the Strategic Assessment of Service Requirement in November 2018. Through this process, DTMR assessed over 100 options to meet the service requirements, which included non-asset based options (such as travel demand management, smart motorways and limiting development), upgrades to the existing M1 and public transport networks, and new asset options including public transport, active transport and various mode options in the Coomera Connector corridor. This comprehensive, multi-criteria analysis of the various options concluded that overall, through all stages of assessment, the Coomera Connector was the highest performing option, and in the top three across all sensitivities. The Preliminary Evaluation concluded that the Coomera Connector provides the greatest value to relieve congestion on the M1 Pacific Motorway between Loganholme and Nerang, though some investment on the M1 will still be required to maintain safety and efficiency. The Preliminary Evaluation has determined preliminary staging of the Coomera Connector, with the priority stage reflecting the 17-kilometre southern section of the corridor. On 25 October 2019, Queensland Premier and Minister for Trade Anastacia Palaszczuk announced Stage 1 of the Coomera Connector between Nerang (Nerang – Broadbeach Road) and Coomera (Oakey Creek Road / Foxwell Road).	



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Following approval of the Preliminary Evaluation, a Business Case for Stage 1 of the Coomera Connector is expected to commence. The Australian Government has announced a funding commitment of \$10 million from the newly created Major Project Business Case Fund (MPBCF) towards the Coomera Connector Business Case.

The alignment of Stage 1 of the Coomera Connector has been determined through rigorous planning studies, constraint analysis, multi-factor evaluation, public consultation and road corridor development planning.

Since the 1990s, DTMR has been purchasing land within the Coomera Connector corridor and now owns 86% of the properties in Stage 1 from Coomera to Nerang.

The alignment for Stage 1 of the Coomera Connector is considered fixed based on the rigorous assessment and public consultation that informed the alignment, its gazettal as a future State-controlled road, the extent of corridor owned by DTMR and the extensive transport infrastructure and development that now exists in proximity to the corridor.

This referral collates environmental data, in particular the presence or absence of Matters of National Environmental Significance (MNES), to determine potential impacts of the project for Stage 1 of the Coomera Connector. Stage 1 of the Coomera Connector will hereafter be referred to as the 'proposed action'.

Stage 1 of the Coomera Connector (proposed action) will be comprised of the following activities:

- Removal of native and exotic vegetation;
- Excavation and fill;
- Stock piling of materials;
- Construction of 17km six-lane road from Oakey Creek Road to Nerang-Broadbeach Road;
- Including construction of interchanges, intersections and bridge structures within the referral area;
- Altering existing overland drainage and creation of basins and wetlands;
- Additional infrastructure including service roads, local road upgrades and Wildlife Movement Solutions (WMS);
- Rehabilitation and revegetation along riparian areas and within terrestrial fauna habitat; and

Interchanges are planned for the following locations;

- Oakey Creek Road
- Helensvale Road
- Gold Coast Highway
- Smith Street Motorway
- Southport-Nerang Road
- Nerang-Broadbeach Road

Bridge structures would be created over the following waterways:

- Oaky Creek
- Coomera River
- Saltwater Creek
- Coombabah Creek
- Nerang River

The subject site for this referral will be from Oakey Creek Road, Coomera to Nerang-Broadbeach Road, Nerang, hereafter referred to as the 'referral area'. The referral area is approximately 17 km in length and 222.8 ha in area. The referral area generally includes a buffer area either side of the proposed six-lane road to accommodate associated infrastructure including; service roads, drainage features, earthworks, retaining walls, active transport facilities, etc.

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The referral area comprises of Stage 1 of the Coomera Connector, from Oakey Creek Road, Coomera to Nerang-Broadbeach Road, Nerang. This stage is approximately 17 km in length and 222.8 ha in area. The area includes a buffer surrounding the alignment in which other utilities and facilities are likely to be accommodated.

As such the landscape within the referral area varies greatly, traversing numerous environmental features and land usage types (including residential, industrial, commercial and agricultural). Whilst the majority of the referral area is predominantly disturbed or regrowth vegetation, environmental features are traversed by the proposed action and include waterways (rivers and creeks), wetlands (lacustrine, palustrine and estuarine), remnant vegetation (including mapped regional ecosystems), reserves and conservation areas.

The waterways traversed by the proposed action, include:



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- Oak Creek
- Coomera River
- Saltwater Creek
- Coomabah Creek
- Nerang River

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

Length of proposed action: 17 km

Referral Area: 222.8 ha

Although this referral assumes the clearing of the entire referral area (land gazetted for Stage 1 of the Coomera Connector), it is considered unlikely that road itself will occupy this entire area. This is illustrated clearly within the road design files provided to DTMR by GHD (2019). The additional area surrounding the road is likely to accommodate ancillary activities and facilities. It is therefore considered unlikely that the development will require clearing within the entire extent of the referral area. As such 222.8 ha has been used as the maximum disturbance footprint.

1.7 Proposed action location

Other - Oak Creek Road, Coomera to Nerang-Broadbeach Road, Nerang, Gold Coast.

1.8 Primary jurisdiction Queensland

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

☐ Yes ☒ No

1.10 Is the proposed action subject to local government planning approval?

☐ Yes ☒ No

1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	01/01/2022
	End Date	31/12/2025

1.12 Provide details of the context, planning framework and state and/or local Government requirements

In gaining approvals for the proposed action DTMR is required to give due consideration to the likely environmental impacts of projects under a number of Commonwealth, State and Local Government laws, guidelines and policies.

The primary piece of legislation that determines DTMR's responsibilities in regard to environmental management in Queensland is the Environmental Protection Act 1994 (EP Act). Section 319 of the EP Act imposes a general "duty of care" (or "general environmental duty") which specifies that a person must not undertake any activity that may harm the environment without taking reasonable and practical measures to prevent or minimise the harm. The table below outlines additional legislation relevant to the proposed action.

Legislation of relevance to the proposed action:

- Environment Protection and Biodiversity Conservation Act 1999
- Environmental Protection Act 1994
- Environmental Offset Act 2014
- Queensland Heritage Act 1992
- Aboriginal Cultural Heritage Act 2003



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- Nature Conservation Act 1992
- Vegetation Management Act 1999
- Planning Act 2016
- Water Act 2000
- Fisheries Act 1994

As government supported road transport infrastructure, the proposed action is exempt from assessment against a local government planning scheme under the Queensland Planning Act 2016. Environmental approvals will be obtained in accordance with the following applicable Queensland Government legislation and policy. State environmental permits, approvals and/or processes applicable to the project include the following:

- accepted development requirements for operational works for constructing or raising waterway barrier works under the Fisheries Act 1994
- requirements under the Environmental Offsets Act 2014 and associated Queensland Environmental Offsets Policy (Version 1.6)
- a protected plant clearing permit and impact management plan for clearing conservation significant flora species under the Nature Conservation Act 1992
- development of a 'high risk' Species Management Program (SMP) under the Nature Conservation Act 1992
- general environmental duty to minimise environmental harm under the Environmental Protection Act 1994
- responsibilities to manage contaminated land under the Environmental Protection Act 1994
- cultural heritage management requirements under the Aboriginal Cultural Heritage Act 2003

Relevant Standards:

AS/NZS 3580: Methods for sampling and analysis of ambient air
EPA (1997) Air quality sampling manual
DERM (2010) State Planning Policy 5/10 Air, Noise and Hazardous Materials
DAFF (2013), WWBW01-P1: Construction of minor dams and weirs (January 2013)
DAFF (2013), WWBW01-P3: Culvert crossings (April 2013)
DAFF (2013), WWBW02: Temporary waterway barrier works (April 2013)
DEHP (2014) Queensland Environmental Offsets Policy (July 2017, version 1.4)
DEHP State Government Supported Community Infrastructure Koala Conservation Policy (July 2017)
DERM (2010) Environmental Protection (Water and Wetland Biodiversity) Policy 2019, Coomera River environmental values and water quality objectives, Basin No.146 (part), including all tributaries of Coomera River.
DERM (Nov 2009) Regional Vegetation Management Code for South East Queensland Bioregion Version 2
DES (2019) DRAFT SEQ Koala Conservation Strategy 2019-2024
DES (2020) Guideline: Assessment Benchmarks in relation to Koala Habitat in South East Queensland (February 2020).
DES (2020) Koala sensitive Design Guidelines: A guide to koala-sensitive design measures for planning and development activities (January 2020).
QPIF (2009) Waterway Barrier Works Development Approvals, Fish Habitat Management Operational Policy
Queensland Department of Main Roads (2000) Fauna Sensitive Road Design. Volume 1: Past and Existing Practices (February 2000).
TMR (2010) Fauna Sensitive Road Design Manual Volume 2: Preferred Practices (June 2010)
EPA (2000) Noise Measurement Manual
DEHP (2013) State Planning Policy - state interest guideline: Emissions and hazardous activities (July 2014)
TMR (2013) Transport Noise Management Code of Practice
Institution of Engineers Australia, QLD Division (1996) Soil erosion and sediment control – engineering guidelines for Queensland construction sites
QASSIT (1998) Guidelines for sampling and analysis of lowland Acid Sulphate Soils in Queensland, Queensland Acid Sulphate Soils Investigation Team
ANZECC (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality
EPA (1999) Water Quality Sampling Manual
SEQ Healthy Waterways Partnership (2006) Water Sensitive Urban Design - Technical Design Guidelines for South East Queensland
Environmental Protection (Water and Wetland Biodiversity) Policy 2019
DERM (2010) State Planning Policy 4/10 Healthy Waterways

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

Since the 1990s, the Coomera Connector corridor has been identified in various planning documents, such as published street directories, regional transport plans, planning studies and City of Gold Coast (CoGC) planning schemes. The consultation process for the CoGC planning scheme's include a public notification period and a number of meetings between CoGC and State Government.



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The joint 2015 study between the DTMR and the CoGC confirmed the corridor is a future strategic transport link that will relieve traffic congestion on the M1 and surrounding local roads. Investigations into confirming the northern alignment between Loganholme and Stapylton commenced in late 2017.

Prior to gazettal of the Coomera Connector as a future State-controlled road, directly impacted landowners were notified. Information about the Coomera Connector, including mapping, is also available on various State Government websites.

From 8 November to 8 December 2019, DTMR conducted extensive community consultation about the Coomera Connector, which included:

- Distribution of over 236,000 newsletters to homes, businesses and PO boxes within proximity to the corridor
- 10 community drop-in sessions at shopping centres and markets along the 45km Coomera Connector
- A dedicated project engagement website
- Phone surveys
- Focus groups
- Briefings for key stakeholders, including elected representatives, government agencies, RACQ and community, environmental and traditional owner groups

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

The environmental assessment process for the proposed action has followed DTMR's internal assessment process described in the Technical Manual: Environmental Processes Manual (TMR 2013). A Matters of National Environmental Significance Assessment report (MNES Assessment) has been prepared to support this referral document collating information gathered during a terrestrial & aquatic flora and fauna assessment. The assessment comprised of a review of existing assessments within proximity to the referral area, numerous desktop searches, field-based surveys and ground-truthing investigations. Surveys were conducted for a 12-month intensive surveying period and with ongoing targeted surveys in the lead up to this referral to encompass all seasons, weather and climate events to provide a comprehensive species list.

1.15 Is this action part of a staged development (or a component of a larger project)?

☒ Yes ☐ No

1.15.1 Provide information about the larger action and details of any interdependency between the stages/components and the larger action

The proposed action is Stage 1 of an expected two-stage development. Stage 1 will be from Oakey Creek Road, Coomera to Nerang-Broadbeach Road, Nerang.

Minor clearing for early works (i.e. boreholes, potholes, test pits, PUP installation/relocation etc.) are likely to begin prior to the construction phases of the proposed action. These actions on their own are not considered to have a significant impact on MNES, as clearing is likely to be less than 1 ha. As noted above the proposal assumes the clearing of the entire extent of land gazetted for the proposed action, including areas in which early works are to occur. As locations for potential early works are determined, the proponent will notify the Department accordingly.

There are no funds committed for the Business Case for Stage 2. Alternate alignments provided by the community around Eagleby are being assessed and considered by Transport and Main Roads. Further planning for Stage 2 will be considered separately to the Business Case for Stage 1.

1.16 Is the proposed action related to other actions or proposals in the region?

☐ Yes ☒ No



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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☒ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☒ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☒ Yes ☐ No

Wetland

Moreton Bay Ramsar Wetland

Impact

The proposed action is within proximity to the Moreton Bay Ramsar Wetland. The referral area intersects areas of the Moreton Bay Ramsar Wetland south of Helensvale Road on the north-western edge of wetlands associated with Coombabah Lake. There are extensive areas downstream of the proposed action, including Coombabah Lake and Creek, and Saltwater Creek, beginning immediately to the east of the referral area.

The Moreton Bay Ramsar Wetland Comprises of approximately 113,314 ha, including:

- Moreton Island
- Parts of North Stradbroke Island
- Parts of South Stradbroke Island
- Parts of Bribie Island
- Some of Southern Bay Islands
- Waters and tributaries of Pumicestone Passage
- Some intertidal and subtidal areas of the western bay, southern bay and sandy channels of the Broadwater Region
- Marine areas and sand banks within the central and northern bay
- Some beach habitats (DEE 2014d).

The Ramsar wetland around Coombabah Lake and Coombabah Creek is described in detail in the aquatic ecology assessment for the Coomera Connector by FRC Environmental (FRC) 2018-2019. It is noted that an extensive aquatic ecological literature review was also undertaken by FRC in 2014 for the Coomera to Helensvale – Heavy Rail Duplication (FRC 2014) and was surveyed by FRC in September 2014. Vegetated habitats in the Ramsar wetland are dominated by mangroves, with some saltmarsh, melaleuca forest and casuarina forest. Aquatic habitats within the Moreton Bay Ramsar Wetland include seagrass and shoals, tidal flats, mangroves, saltmarshes, coral communities, freshwater wetlands, peatland habitats, ocean beach and foredunes. The area supports more than 50,000 migratory wader birds during their non-breeding season and approximately 30 migratory species listed on international conservation agreements (DEE 2074d).

FRC identified that the Coombabah wetlands are significant because they are the most southerly lake and coastal swampland representatives in the bioregion, and because the area provides significant wildlife value and refuge habitat. Remnant vegetation mosaics are tens to hundreds of hectares in size. Remnant connectivity is poor and mosaics occur primarily as isolated fragments. Remnants have low to modest integrity, primarily due to numerous edge effects, illegal waste disposal and weed growth, clearing and fire. Weeds in the lowland areas include groundsel (*Baccharis halimifolia*), ragweed (*Ambrosia* species), introduced pine wildings and various pasture and annual species (Forestman & Associates 1998, Millington 2001). The habitat areas include about 560 ha of the tidal wetland, and the area is recognised as an important fish habitat area by gazettal. The majority of the tidal lake and surrounding swamp area is used by waders for feeding and roosting (Knight et al 2004).

Overall, the aquatic habitats adjacent the proposed action were in moderate condition, although the concentration of dissolved oxygen in the water was low. The aquatic habitats in the Ramsar wetland downstream of the proposed action were



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also in moderate to good condition. Mangrove communities consist predominantly of *Avicennia marina* with some *Rhizophora stylosa* and *Aegiceras corniculatum*. Despite some isolated patches of dead trees and some evidence of epicormic growth, the mangroves were generally in good condition, with minimal insect damage and leaf loss, and a moderate abundance of epifauna. There were some obstructions to flow, particularly at the southern end of the Ramsar wetland, south of the Gold Coast Highway, where culverts were poorly maintained. These obstructions resulted in poor flushing and stagnant pools. Rubbish was also common in the areas adjacent to the Gold Coast Highway.

The proposed action intersects the Ramsar Wetland south of Helensvale Road. The referral area in this section abuts the existing heavy rail corridor which is predominantly cleared of vegetation. The eastern boundary of the proposed action runs adjacent to the mapped Ramsar Wetland area. Vegetation along this boundary may be both directly and indirectly affected during construction of the proposed action and infrastructure. The wetland in the likely area of disturbance is primarily regrowth from previous railway works.

The proposed action has direct impact area of 4.606ha to Ramsar Wetlands. This is the maximum disturbance area for this MNES. In comparison to the total Moreton Bay Ramsar Wetlands area of 113,314 ha, the direct impact area is therefore considered insignificant at only 0.004% of the total wetland size.

2.3.2 Do you consider this impact to be significant?

☐ Yes ☒ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☒ Yes ☐ No

Species or threatened ecological community

Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland

Impact

This community was listed as a threatened ecological community (TEC) on 20 March 2018. This TEC is considered likely to occur within the referral area as comparable Regional Ecosystems (RE 12.1.1 and RE 12.3.20) are known to occur within the locality.

RE 12.1.1:

Helensvale (Helensvale Rd, adjacent to Coombabah Wetlands; and Careel Reserve); Coomera (Oak Creek; Ford Rd).

RE 12.3.20:

Coomera (Oak Creek; Coomera River; Hope Island Rd); Helensvale (Helensvale Rd); Arundel (New Heath Drive); Molendinar (Southport-Nerang Rd); and Carrara (Nerang-Broadbeach Rd).

Areas associated with Oak Creek, Coombabah Lake and Coombabah Creek are likely to experience the largest disturbance. Approximately 11.1 ha of this TEC has been confirmed within the referral area and 10.61 ha is considered to be critical habitat.

As noted within Section 1 above, the assessment of MNES includes both direct and indirect impacts, which may occur as a result of the maximum disturbance footprint. It is considered likely that the proposed action may have a significant impact on this TEC.

Species or threatened ecological community

Subtropical and Temperate Coastal Saltmarsh

Impact

This community is known to occur in areas within and east of the proposed action in association with the inter-tidal zone of Coombabah Wetlands and Oak Creek.

Field surveys confirmed the presence of this community south of Oak Creek and along the southern bank of Coombabah Creek. Approximately 1.567 ha of this community has been confirmed within the referral area. The referral area however is the maximum disturbance footprint and is unlikely to be completely occupied by the proposed action and associated activities, minimising the direct impact on this TEC.

This community occurs within low-lying areas, where bridge structures are to be constructed further reducing the direct



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impact on this community.

The proposed action is therefore considered unlikely to have a significant impact on this community.

Species or threatened ecological community

Eastern Curlew (*Numenius madagascariensis*)

Impact

This species was recorded within Coombabah Lake, approximately 800 metres from the proposed action.

This species was not recorded within the referral area. It is considered unlikely that the proposed action will have a significant impact on this species as a result of the abundance of habitat within the region (Coombabah Wetlands and surrounding Moreton Bay Ramsar Wetlands). Additionally, this species is migratory and highly mobile, enabling access to a wide range of habitats.

Species or threatened ecological community

Koala (*Phascolarctos cinereus*)

Impact

An abundance of information exists regarding koala occurrence and habitat within the referral area. In addition to the surveys conducted as part of the ecological assessments for the proposed action, the Gold Coast koala populations have been closely monitored by previous studies and assessments by City of Gold Coast (CoGC).

These assessments have established baseline monitoring for koala populations present within the referral area and wider region, providing further information to inform koala abundance, movements and habitat preferences in the impact area. These factors are important to consider as the proposed action has a large footprint and is considered likely to have landscape-scale impacts.

Studies include:

- Conserving koalas in the Coomera-Pimpama Koala Habitat Area: a view to the future 2007
- Koala Habitat and Population Assessment for Gold Coast City LGA 2007
- East Coomera Koala Population Study 2017 (ECKPS)
- Parkwood-Coombabah Koala Population Study 2017 (PCKPS)

It is noted that the most recent studies acknowledged that the referral area was a future transport corridor when considering impacts to the Gold Coast koala populations.

Biolink 2007-This study covered the greater Coomera-Pimpama Koala Habitat Area (C-PKHA) a total area of 3640 ha. This area was surveyed with the Spot Assessment Technique (SAT) (Philips and Callaghan 2011) to first estimate activity levels and then strip transects to estimate Koala densities in occupied areas. The strip transect estimates were extrapolated from the Coombabah Koala Habitat Area. Results estimated that there were approximately 510 (+/-129) Koalas present in the C-PKHA at the time of the study.

ECKPS-This study revisited the 2007 Coomera-Pimpama area and surveyed remaining koala habitat (1,467 ha), using both the SAT technique and strip transects. A density estimate of 0.34 ± 0.05 was derived from the SAT-based radial searches and extrapolated over the remaining habitat resulting in an projected koala population of 499 ± 74 koalas within the East Coomera study area. This study also stated that it is still possible to establish a sustainable koala population within the rural landscape of Coomera, external to the urban footprint and east of the proposed action.

PCKPS-This study examined the current distribution, size, conservation status and viability of the koala population within the reserves and urban areas of Parkwood-Coombabah. An estimated koala population of 266 ± 46 was derived based on a density of 0.23 ± 0.04 koalas ha⁻¹. The study confirmed that koalas are still resident in the majority of locations within the study area, where habitat has remained protected.

As a population the koalas located within the Gold Coast LGA have been largely unaffected by the recent bushfires. Additionally, the local populations impacted by the proposed action (Coomera-Pimpama & Parkwood-Coombabah) are separated from the wider Gold Coast population by the Pacific Motorway which is recognised as a barrier to koala movements. As such it is considered that the recent bushfires would not increase the risk to this species further.

2019 Koala specific surveys – Parkwood to Helensvale

Targeted koala field surveys conducted using the line transect method were performed between March-April 2019 within bushland from south of the Smith Street Motorway Interchange to north of Helensvale Road. These surveys resulted in the observation of sixteen (16) koalas, including one adult carrying a juvenile. This is a breeding population.

Opportunistic observations of koalas have also occurred during diurnal and nocturnal survey works, resulting in more than



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40 koala observations throughout the study area. Additionally, there are numerous historical koala records within and adjacent to the referral area from other reliable sources including WildNet and CoGC.

Remnant and regrowth bushland habitat within the Coomera-Pimpama and Parkwood-Coombabah areas within the referral area exhibit characteristics of critical koala habitat in accordance with the Koala Habitat Assessment Tool. The Koala Habitat Assessment Tool outlined within the Koala Referral Guidelines assists in determining the sensitivity, value and quality of the impact area and whether it contains habitat critical to the survival of the koala. Areas that score five or more using the tool are considered to contain habitat critical to the survival of the koala. Sections of the referral area, particularly Parkwood-Helensvale area, are considered to score +8 against the Koala Habitat Assessment Tool.

Approximately 98.07 ha of mapped koala habitat occurs within the referral area. This includes a range of habitat categories including bushland habitat, rehabilitation and other and each range from low to high value. Only 33.41 ha of the mapped koala habitat within the referral area is bushland habitat, however individuals have been recorded within areas not mapped as koala habitat (i.e. Smith Street).

Species or threatened ecological community

Grey-headed Flying-fox (*Pteropus poliocephalus*)

Impact

This species has been recorded within and adjacent to the referral area. Two (2) roosts were identified: one (1) within the referral area and another adjacent, west of the Gold Coast Heavy Rail Line.

A nationally important flying-fox camp, comprising of Grey-headed Flying Fox, is recorded on the National Flying-fox monitoring viewer located at Emerald Lakes Wetlands, Carrara. It is considered unlikely that the proposed action will have a direct impact on the roost within this location.

Tree species within the referral area do form part of the broader components which make up the critical habitat factors for this species, primarily within retained bushland within Helensvale/Coombabah. Approximately 54.2ha of remnant vegetation within the referral area is considered to provide potential habitat for this species.

This species is considered to be highly mobile in nature and habitat is considered widely available within the region. Relocation of camps are relatively frequent for this species in response to availability of foraging resources.

The implementation of mitigation measures are likely to reduce potential impacts to this species. Roost locations can change frequently and construction can be organised within non-breeding seasons to minimise disruption important to lifecycle stages.

As such it is considered unlikely that the proposed action will result in a significant impact on this species.

Species or threatened ecological community

Australian Painted Snipe (*Rostratula australis*)

Impact

The Painted Snipe is known to breed within Saltmarsh habitats at Hope Island which are located approximately 2.7km east of referral area.

This species was identified between Coombabah Creek and Tanzen Drive, approximately 1 km east of the proposed action.

This species is unlikely to be significantly impacted by the proposed action. Minimal habitat is expected to be removed and/or modified.

2.4.2 Do you consider this impact to be significant?

☒ Yes ☐ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☒ Yes ☐ No

Migratory species

Sharp-Tailed Sandpiper (*Calidris acuminata*)
Red-necked Stint (*Calidris ruficollis*)
Latham's Snipe (*Gallinago hardwickii*)



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Bar-tailed Godwit (*Limosa lapponica*)
Black-faced Monarch (*Monarcha melanopsis*)
Satin Flycatcher (*Myiagra cyanoleuca*)
Whimbrel (*Numenius phaeopus*)
Osprey (*Pandion haliaetus*)
Glossy Ibis (*Plegadis falcinellus*)
Grey plover (*Pluvialis squatarola*)
Rufous Fantail (*Rhipidura rufifrons*)
Marsh Sandpiper (*Tringa stagnatilis*)

Impact

The proposed action traverses habitat, including waterways, wetlands and wetland vegetation communities which may be utilised occasionally by migratory species. It is considered that important habitat for migratory species is predominantly external to the referral area. Important habitat is present within the region predominantly within Eagleby Wetlands, Carbrook Wetlands, Gold Coast Broadwater, Coombabah Lakelands and Moreton Bay Ramsar Wetland.

Wetlands and waterways provide significant habitat for aquatic and bird species. Listed threatened, migratory and marine species also access these areas for foraging, shelter, refuge or nesting. Approximately 42.81 ha of mapped wetlands occur within the referral area (CoGC Planning Scheme overlays).

The proposed action traverse the Ramsar Wetland south of Helensvale Road on the north-western edge of wetlands associated with Coombabah Lake, and are within 1.7km of the upstream limit of the Ramsar Wetland in this area. The proposed action traverses approximately 4.606ha of Ramsar Wetland.

As the proposed action runs parallel with the heavy and light rail corridors from Coomera River to Nerang River, the wetlands and waterways traversed by the proposed action have been previously disturbed and modified to accommodate rail works.

The proposed action is likely to intensify fragmentation and may contribute to the following indirect impacts to wetland areas:

- increased turbidity and sedimentation within waterways, and subsequent smothering of aquatic flora and fauna
- nutrient enrichment and disturbance of contaminated sediments
- disturbance of acid sulfate soils
- changes to flow (particularly flood flows) and fish passage
- spills of hydrocarbons and other contaminants
- spread of weeds, and
- increase in litter

However, migratory bird species are considered to be highly mobile in nature and habitat is considered widely available within the region. The gazetted corridor route and road design has been adapted to avoid areas of environmental significance where practicable.

The potential migratory species habitat within the referral area is not considered 'important habitat' however areas adjacent to the referral area (i.e. Moreton Bay Ramsar Wetlands and Coombabah Lakelands) are and may be indirectly impacted by the proposed action, though not substantially.

It is considered unlikely that the proposed action will have a significant impact on identified migratory species as they are considered to be highly mobile and significant habitat is available within the region (i.e. Eagleby Wetlands, Carbrook Wetlands, Gold Coast Broadwater, Moreton Bay Ramsar Wetlands and Coombabah Wetlands).

2.5.2 Do you consider this impact to be significant?

☐ Yes ☒ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☒ No



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2.7 Is the proposed action likely to be taken on or near Commonwealth land? ☐ Yes ☒ No
2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park? ☐ Yes ☒ No
2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development? ☐ Yes ☒ No
2.10 Is the proposed action a nuclear action? ☐ Yes ☒ No
2.11 Is the proposed action to be taken by a Commonwealth agency? ☐ Yes ☒ No
2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas? ☐ Yes ☒ No
2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area? ☐ Yes ☒ No



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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

The Coomera Connector provides a future transport link from Loganholme in the north to Nerang in the south. This referral is specific to Stage 1 of the Coomera Connector. The proposed action is 17km in length, from Oakey Creek Road to Nerang-Broadbeach Road. The referral area of 222.8 ha comprises of the proposed road and space for ancillary works and associated utilities.

The landscape within the proposed action alignment varies greatly, traversing numerous environmental features and land usage types (including residential, industrial, commercial and agricultural). The environmental features traversed by the proposed action include waterways (rivers and creeks), wetlands (lacustrine, palustrine and estuarine), remnant vegetation (including mapped regional ecosystem), reserves and conservation areas.

Surveys were conducted to identify flora species and ecological communities within the study area and confirm the findings of the desktop review. Potential survey limitations were accounted for throughout the surveying period including optimal seasons to best target species facilitating observation and identification accuracy (e.g. flowering periods).

Existing vegetation mapping from the Queensland Herbarium was reviewed prior to surveys being conducted and then later verified in the field. The Queensland Herbarium maps both the pre-clearing and remnant vegetation providing regional ecosystem descriptions which were used as a guide to target flora survey sites and identify plant communities present within the referral area.

Throughout the referral area vegetation is highly variable due to the size and length of the proposed action and historic and existing land uses. Clearing and fragmentation of the bushland within the referral area for agriculture and urban development has resulted in high levels of weed invasion and reduced landscape connectivity.

Patches of vegetation were examined to confirm TEC, RE presence and record the occurrence of threatened flora species under the EPBC Act and NCA.

It is also to be noted that several patches of vegetation share ecotones or are mixed between two of the broad vegetation types. For these patches both regrowth RE types are listed but the broad vegetation type assigned is that estimated to have the higher biomass. For example, an area of Swamp Oak regrowth with scattered eucalypts as emergents is assigned to the 'Swamp Oak' group. An area of regrowth Blue Gum and Grey Ironbark as an open forest or woodland with a smaller tree layer dominated by Swamp Oak is assigned to the 'Swamp Sclerophyll' group.

In areas where ornamental or exotic species are co-dominant or sub-dominant within the canopy the patch is assigned to the 'native' component of that patch.

The typical vegetation communities identified within the referral area are as follows;

- Dry sclerophyll
- Swamp sclerophyll
- Swamp oak
- Paperbark
- Mangroves
- Saltmarsh
- Miscellaneous/non-remnant/modified/cleared

REs account for approximately 72.99 ha of vegetation within the referral area (222.8ha). The remaining area includes estuary (2.9 ha), water (0.09 ha) and non-remnant (146.68 ha).

The non-remnant vegetation primarily consists of heavily modified agricultural vegetation and urban development areas.

The flora surveys confirmed the presence of two (2) TECs:

- Subtropical and Temperate Coastal Saltmarsh; and
- Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland.

The fauna assessment of the referral area was performed in two components:

1. Desktop Assessment of databases, existing reports and mapped vegetation communities/suitable habitat; and
2. Field surveys were conducted between July 2018 and July 2019, including diurnal and nocturnal surveys and direct and indirect methods for determining presence/absence of MNES.



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Surveys were conducted in accordance with the following guidelines:

- DES (2018) Terrestrial Vertebrate Fauna Survey Guidelines for Queensland, Queensland Herbarium
- DEWHA (2010) Survey guidelines for Australia's threatened birds
- DEWHA (2010) Survey guidelines for Australia's threatened bats
- DSEWPC (2011) Survey guidelines for Australia's threatened mammals
- DSEWPC (2011) Survey guidelines for Australia's threatened reptiles

Over two-hundred (200) fauna species were recorded during surveys, comprising:

- Ten (10) amphibian species
- One-hundred and fifty-eight (158) bird species;
- Thirty (30) mammal species; and
- Sixteen (16) reptile species.

Four (4) threatened fauna species were recorded within or adjacent to the referral area:

- Koala (*Phascolarctos cinereus*)
- Grey-headed Flying-fox (*Pteropus poliocephalus*)
- Australian Painted Snipe (*Rostratula australis*)
- Eastern Curlew (*Numenius madagascariensis*)

Thirteen (13) migratory species and twenty-seven (27) marine species were also recorded during surveys within and adjacent the referral area.

3.2 Describe the hydrology relevant to the project area (including water flows)

The proposed action traverses three (3) catchment areas within the Gold Coast; Coomera River Catchment, Coombabah Catchment and Nerang River Catchment.

The referral area is exposed to tidal inundation and wetlands and waterways are influenced by tidal patterns.

Significant wetlands occur within the referral area including the Moreton Bay Ramsar Wetland and Coombabah Wetlands.

The waterways within the referral area include;

- Oaky Creek
- Coomera River
- Saltwater Creek
- Coombabah Creek
- Nerang River

The road design has incorporated numerous bridge structures over waterways and wetland areas which will minimise vegetation clearing and hydraulic impacts to these areas. Proposed culverts and bridge structures will be consistent with those installed for the heavy rail duplication and light rail projects, maintaining existing hydraulics within these locations.

3.3 Describe the soil and vegetation characteristics relevant to the project area

A review of the South-east Queensland Region Geoscience Data Set (DNRME, 2005) notes that the referral area consists primarily of one lithostratigraphic group (Neranleigh-Fernvale beds) and to a lesser extent, one sub-group (Woogaroo).

Neranleigh-Fernvale beds (DCf)

This group forms part of the Wandilla province and is aged from the Early Carboniferous to the Late Devonian period. It is comprised of mudstone, shale, arenite, chert, jasper, basic metavolcanics, pillow lava and conglomerate. It is mapped throughout majority of the referral area.

Woogaroo

This group forms part of the Clarence-Moreton Basin province and is aged from the Early Jurassic to the Late Triassic period. It is comprised of sublabele to quartzose sandstone, siltstone, quartz-rich granule to cobble conglomerate, and coal.

Landform

A review of the state governments (DES/DNRM) regional ecosystem mapping for the site identifies five land zones which are described by Wilson and Taylor (2012) as:



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Land Zone 1 - Tidal flats and beaches

Quaternary estuarine and marine deposits subject to periodic inundation by marine waters. Includes mangroves, saltpans, off-shore tidal flats and tidal beaches. Soils are predominantly Hydrosols (saline muds, clays and sands) or beach sand.

Land Zone 2 – Coastal dunes

Quaternary coastal dunes and beach ridges. Includes degraded dunes, sand plains and swales, lakes and swamps enclosed by dunes, as well as coral and sand clays. Soils are predominantly Rudosols and Tenosols (siliceous or calcareous sands), Podosols and Organosols.

Land Zone 3 - Alluvial river and creek flats

Recent Quaternary alluvial systems, including closed depressions, paleo-estuarine deposits currently under freshwater influence, inland lakes and associated wave-built lunettes. Excludes colluvial deposits such as talus slopes and pediments. Includes a diverse range of soils, predominantly Vertosols and Sodosols and inclusive of Dermosols, Kurosols, Chromosols, Kandosols, Tenosols, Rudosols, Hydrosols and Organosols (in high rainfall areas).

Land Zone 11 - Hills and lowlands on metamorphic rocks

Metamorphosed rocks, forming ranges, hills and lowlands. Primarily lower Permian and older sedimentary formations which are generally moderately to strongly deformed. Includes low to high-grade and contact metamorphics such as phyllites, slates, gneisses of indeterminate origin, serpentinite, and interbedded volcanics. Soils are mainly shallow, gravelly Rudosols and Tenosols, with Sodosols and Chromosols on lower slopes and gently undulating areas. Soils are typically of low to moderate fertility.

The underlying geological units are utilised in association with the existing vegetation to ground-truth and classify regional ecosystem types. Analysis of the regional ecosystem types occurring within bushland on similar geology can provide insight on what pre-clearing vegetation communities previously occurred in cleared or developed areas.

Whilst the majority of the referral area is predominantly disturbed or regrowth vegetation due to the existing agricultural and urban land uses, the proposed action traverses patches of vegetation including the following communities:

- Dry Sclerophyll,
- Swamp Sclerophyll,
- Swamp Oak Forest,
- Paperbark Forest,
- Mangroves,
- Saltmarsh, and
- Miscellaneous/non-remnant/modified/cleared.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

The proposed action traverses a small portion of the Moreton Bay Ramsar Wetland south of Helensvale Road on the north-western edge of wetlands associated with Coombabah Lake. There are extensive areas of the Moreton Bay Ramsar Wetland downstream of the proposed action, including Coombabah Lakelands, Coombabah Creek, and Saltwater Creek, beginning immediately to the east of the referral area.

The Moreton Bay Ramsar Wetland comprises of approximately 113,314 ha, including:

- Moreton Island
- Parts of North Stradbroke Island
- Parts of South Stradbroke Island
- Parts of Bribie Island
- Some of Southern Bay Islands
- Waters and tributaries of Pumicestone Passage
- Some intertidal and subtidal areas of the western bay, southern bay and sandy channels of the Broadwater Region
- Marine areas and sand banks within the central and northern bay
- Some beach habitats (DEE 2014d).

The Ramsar wetland around Coombabah Lakelands and Coombabah Creek is described in detail in the aquatic ecology assessment for the Coomera Connector by FRC Environmental (FRC) 2018-2019. An extensive aquatic ecological literature review and survey were also undertaken by FRC in 2014 for the Coomera to Helensvale – Heavy Rail Duplication (FRC



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2014). Vegetated habitats in the Ramsar wetland are dominated by mangroves, with some saltmarsh, melaleuca forest, and casuarina forest. Aquatic habitats within the Moreton Bay Ramsar Wetland include seagrass and shoals, tidal flats, mangroves, saltmarshes, coral communities, freshwater wetlands, peatland habitats, ocean beach and foredunes. The area supports more than 50,000 migratory wader birds during their non-breeding season and approximately 30 migratory species listed on international conservation agreements (DEE 2074d).

FRC identified that the Coombabah wetlands are significant because they are the most southerly lake and coastal swampland representatives in the bioregion, and because the area provides significant wildlife value and refuge habitat. Remnant vegetation mosaics are tens to hundreds of hectares in size. Remnant connectivity is poor and mosaics occur primarily as isolated fragments. Remnants have low to modest integrity, primarily due to numerous edge effects, illegal waste disposal and weed growth, clearing and fire. Weeds in the lowland areas include groundsel (*Baccharis halimifolia*), ragweed (*Ambrosia* species), introduced pine wildings and various pasture and annual species (Forestman & Associates 1998, Millington 2001). The habitat areas include about 560 hectares of the tidal wetland, and the area is recognised as an important fish habitat area by gazettal. The majority of the tidal lake and surrounding swamp area is used by waders for feeding and roosting (Knight et al 2004).

Impacts and current risks identified to the Coombabah Wetland include:

- Urban and industrial infrastructure, including drainage from these areas
- Vegetation clearing and use of pesticides and herbicides, encroachment of weeds into native habitat
- Urban and industrial rubbish dumping
- Effluent and stormwater runoff
- Arson
- Continued fragmentation
- Urban discharges including from the sewage treatment plant and stormwater
- Noise and light pollution
- Canal development (Knight et al. 2004).

Potential risks identified to Coombabah wetlands include:

- Continued fragmentation: this has been ameliorated by the establishment of the Coombabah Lakelands Conservation area, the Moreton Bay Marine Park, the Ramsar Wetland and the Fish Habitat Areas
- Sewage spills: this has been ameliorated by the recent upgrade of the sewage treatment plant
- Anoxic runoff from golf courses and other sports facilities
- Major aircraft, road or rail accidents within the catchment
- A major increase in water acidity due to disturbance of acid sulfate soils (Knight et al. 2004).

3.5 Describe the status of native vegetation relevant to the project area

The referral area is predominantly non-remnant vegetation, 146.68 ha. Approximately 72.99 ha of the referral area is considered remnant vegetation and mapped as regional ecosystems under the Vegetation Management Act 1992 (Qld).

The referral area comprises of the following regional ecosystems:

- 12.1.1: Casuarina glauca woodland on margins of marine clay plains (13.89 ha) - Of Concern
- 12.1.2: Saltpan vegetation including grassland, herbland and sedgeland on marine clay plains (1.29 ha) - Least Concern
- 12.1.3: Mangrove shrubland to low closed forest on marine clay plains and estuaries (0.98 ha) - Least Concern
- 12.2.15: Gahnia sieberiana, Empodisma minus, Gleichenia spp. closed sedgeland in coastal swamps (0.66 ha) - Least Concern
- 12.3.11: Eucalyptus tereticornis +/- Eucalyptus siderophloia, Corymbia intermedia open forest on alluvial plains usually near coast (1.18 ha) - Of Concern
- 12.3.20: Melaleuca quinquenervia, Casuarina glauca +/- Eucalyptus tereticornis, E. siderophloia open forest on low coastal alluvial plains (1.96 ha) - Endangered
- 12.11.23: Eucalyptus pilularis open forest on coastal metamorphics and interbedded volcanics (10.26 ha) - Endangered
- 12.11.24: Eucalyptus carnea, E. tindaliae, Corymbia intermedia +/- E. siderophloia or E. crebra woodland on metamorphics +/- interbedded volcanics (9.9 ha) - Least Concern
- 12.11.24/ 25/27 (32.87 ha)
- 12.11.25: Corymbia henryi and/or Eucalyptus fibrosa subsp. fibrosa +/- E. crebra, E. carnea, E. tindaliae woodland on metamorphics +/- interbedded volcanic - Of Concern
- 12.11.27: Eucalyptus racemosa subsp. racemosa and/or E. seeana and Corymbia intermedia woodland on metamorphics +/- interbedded volcanics - Endangered

Total Remnant Vegetation	72.99 ha
Non-remnant	146.68 ha
Estuary	2.978 ha



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Water 0.09 ha

Three (3) of the regional ecosystems which occur within the referral area are compatible with threatened ecological communities:

- 12.3.20 and 12.1.1 which are both comparable to the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland; and
- 12.1.1 which is consistent with the Subtropical and Temperate Coastal Saltmarsh community.

The PMST identified the potential occurrence of three (3) Threatened Ecological Communities (TECs) within the study area:

- Subtropical and Temperate Coastal Saltmarsh
- Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland
- Lowland Rainforest of Subtropical Australia

The flora surveys confirmed the presence of two (2) of these TECs:

- Subtropical and Temperate Coastal Saltmarsh; and
- Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland.

The Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland is listed as endangered under the EPBC Act. Approximately 11.1 ha of this community, which meets the key diagnostics thresholds, was recorded within the referral area. Surveys were conducted to determine the quality of habitat for this TEC within the referral area. Approximately 10.61 ha is considered to be critical habitat.

Approximately 1.567 ha of Subtropical and Temperate Saltmarsh was recorded within the referral area. This community is listed as vulnerable under the EPBC Act. The majority of this community is located between Oaky Creek and Shipper Drive in Coomera.

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

Gradient varies throughout the referral area from 0 to >60m in elevation, Australian Height Datum (AHD) (Queensland Globe 2017). The highest elevation of the proposed action occurs at the Smith Street Interchange and the lowest elevations are associated with waterways and wetlands (i.e. Oaky Creek, Coomera River, Saltwater Creek, Coombabah Lakelands/Wetland, Coombabah Creek and Nerang River).

3.7 Describe the current condition of the environment relevant to the project area

The condition of the environment within the referral area varies greatly. Surrounding land uses comprise of residential, commercial, industrial and major infrastructure (rail and roads). The referral area is bordered by urban development to the east and west, primarily residential and industrial estates and existing linear infrastructure including the Pacific Motorway, heavy rail and light rail, limiting potential environmental values.

Approximately 72.99 ha within the referral area is considered remnant vegetation and approximately 146.68 ha is considered non-remnant.

REs mapped within the referral area are considered to represent the Coastal Swamp Oak (*Casuarina glauca*) Forest TEC. Approximately 11.1 ha of this community has been recorded within Stage 1. Detailed vegetation surveys of this community were undertaken to confirm patch condition. 10.61 ha of this community is considered to be critical habitat for the survival of this ecological community.

The land within the referral area is also mapped as containing approximately 98.07 ha of koala habitat (SEQ Koala Regulatory Provisions) ranging from low to high values (bushland, rehabilitation and other values). Only 9.81 ha is mapped as high value bushland habitat.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

No Commonwealth Heritage Places are located within the referral area.

3.9 Describe any Indigenous heritage values relevant to the project area

There are some mapped Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP) sites located within the referral area, however further investigation (including cultural heritage surveys) will be required to ascertain if these sites remain in situ.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area



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The entire extent of the referral area varies between freehold and leasehold land.

3.11 Describe any existing or any proposed uses relevant to the project area

Surrounding land uses include residential, agricultural, commercial, industrial and major infrastructure (rail and roads).



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Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Measures to avoid and reduce the impact by the proposed action have been sought throughout the planning, design and construction phases.

AVOIDANCE

-The alignment of the proposed action has been determined through rigorous planning studies, constraint analysis, multi-factor evaluation, public consultation and road corridor development planning. The alignment is considered fixed based on the rigorous assessment and public consultation that informed the alignment that's taken place since the 1990s. The gazettal of the corridor as a future State-controlled road, the extent of corridor owned by DTMR and the extensive transport infrastructure and development that now exists in proximity to the referral area impedes alternative options.

-Although this proposal seeks the clearing of the entire land gazetted for Stage 1 of the Coomera Connector, it is considered unlikely that road itself will occupy this entire area. This is illustrated clearly within the road design files provided to DTMR by GHD (2019). The additional area surrounding the road is likely to accommodate ancillary activities and facilities. It is therefore considered unlikely that the development will require clearing within the entire extent of the referral area. As such 222.8 ha has been used as the maximum disturbance footprint.

-The land gazetted for Stage 1 of the Coomera Connector is bound by urban development and other linear infrastructure (i.e. light and heavy rail lines) and consists of predominantly modified and/or regrowth vegetation. Therefore, it avoids large areas of contiguous habitat and remnant vegetation.

-The road alignment has undergone a thorough review to reduce potential environmental, economic and social impacts. The road design has also been refined over the planning phase to reduce potential impacts, including minimising the road footprint and separation from the rail infrastructure to retain as much vegetation and north-south connectivity as possible.

MITIGATION MEASURES

-Integration of Wildlife Movement Solutions and Directional/Exclusion Fencing. In consultation with project design consultants and the City of Gold Coast these structures have been designed to meet and, in most instances, exceed the recommended design specifications outlined within DTMRs Fauna Sensitive Design Guidelines. The project design now typically provides 3m x 3m fauna underpasses which span entire environmentally sensitive areas, thus minimising disturbance to TECs, MNES species habitat, hydrology patterns and fauna dispersal/movements. Wildlife Movement Solutions (WMS) at critical points along the gazetted corridor have been incorporated into the concept design to improve habitat connectivity and reduce potential vehicle strike incidents. Given that the land within the referral area is predominantly low-lying, underpasses have been considered the most suitable type of wildlife movement solution to incorporate into the project design (i.e. pipes, culverts and bridges).

-Construction Work Practices

The Qld Department of Environment and Science (DES) and the DTMR established a Memorandum of Agreement (MoA) for government supported transport infrastructure within the SEQ Koala Protection Area (SEQKPA). The MoA establishes the respective roles and responsibilities of DES and DTMR to ensure that planning, design, construction and maintenance of government supported transport infrastructure in the SEQKPA is carried out in a way that seeks to avoid, minimise and finally offset adverse impacts to koalas and their habitats.

Clearing activities associated with the proposed action are to comply with State and Regional regulatory provisions. To avoid unnecessary impacts upon native vegetation and fauna species and their habitats throughout the construction phase of the proposed action, the impact mitigation and management measures listed below will be further developed.

- Vegetation clearing procedures
- Pre-clearance surveys of proposed areas of disturbance prior to the commencement of vegetation clearing and construction activities.
- Species management programs (SMPs)
- Spotter-catcher procedures to capture and remove native fauna species to minimise the risk of fauna injury and mortality during vegetation clearing and construction activities
- Weed control measures prior to construction and during construction phases of the proposed action, to minimise the risk of weed invasion and spread
- Erosion and sediment control
- Dust suppression during construction activities
- Noise and vibration control

A Koala Management Plan (KMP) is to be developed by suitably qualified persons to mitigate potential impacts to both individuals and koala populations. The KMP will detail the existing koala environment, impacts and mitigation actions specific to this species.



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4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

The direct impact of the proposed action should not exceed maximum impact area estimates calculated within the MNES Assessment Report, prepared by Planit Consulting 2020. The assessment estimated direct impact based on the maximum disturbance footprint for the proposed action:

Maximum direct impact areas for MNES

MNES	Impact Area (ha)
Moreton Bay Ramsar Wetland	4.606
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest	11.1
Subtropical and Temperate Coastal Saltmarsh	1.567
Koala (Bushland Habitat)	98.07
Grey-headed Flying Fox	54.2
Migratory and Marine Habitat (Wetlands)	42.81
Total	212.353

Further avoidance and mitigation measures are to be implemented where practical throughout the delivery of the proposed action for listed ecological communities, threatened species and migratory species so as to avoid a significant impact (refer section 4.1). Activities associated within the proposed action are to be conducted in accordance with all future management plans.



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Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☒ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

The Moreton Bay Ramsar Wetlands is unlikely to be significantly impacted by the proposed action. The maximum area of impact is 4.406ha, or 0.004% of the total Ramsar Wetland. As discussed in previous sections above, the design in these areas is predominantly bridge structures, avoiding the majority of this sensitive area and reducing potential impacts. Indirect impacts are also considered unlikely to have a significant impact on this MNES. Mitigation measures will be implemented during the construction and operational phases to reduce impacts.

The proposed action is considered likely to have a significant impact on the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland endangered ecological community. Approximately 11.1 ha of this community occurs within the referral area, 10.61 ha of which is considered to be critical habitat. The maximum direct impact area accounts for only 5.8% of this community found within 1km of the proposed action.

The proposed action is unlikely to have a significant impact on the Subtropical and Temperate Coastal Saltmarsh ecological community. Approximately 1.567ha of this community occurs within the referral area, predominantly located at Shipper Drive, Coomera. There is approximately 57.81ha of this ecological community within 1km of the proposed action. The maximum direct impact area equates to only 2.7% of this ecological community within 1km of the proposed action.

The potential impacts to individual koalas and local populations (Pimpama-Coomera and Parkwood-Coomababah Koala Populations), are likely to be significant given the removal of known and potential habitat, the displacement of individuals and disruption to dispersal and movement opportunities.

Impacts to other identified threatened species (i.e. Grey-headed Flying Fox, Australian Painted Snipe & Eastern Curlew) are not considered to be significant given the availability of alternative habitat within the region and their highly mobile nature.

Impacts to listed migratory species are considered unlikely to be significant as a result of their mobility and abundance of potential habitat and foraging resources that are external to the referral areas

The Coomera Connector alignment has undergone a thorough review to reduce potential environmental, economic and social impacts. The road design has also been refined over the planning phase to reduce potential impacts.

Although this referral assumes the clearing of the entire land gazetted for the proposed action, it is considered unlikely that road itself will occupy this entire area. This is illustrated clearly within the road design files provided to DTMR by GHD (2019). The additional area surrounding the road is likely to accommodate ancillary activities and facilities. It is therefore considered unlikely that the development will require clearing within the entire extent of the referral area. As such 222.8ha is considered to be the maximum disturbance footprint.

Minor clearing for early works (i.e. boreholes, potholes, test pits, PUP installation/relocation, etc.) are likely to begin prior to the construction phases of the proposed action. These actions on their own are not considered to have a significant impact on MNES as clearing is likely to be less than 1 ha. As noted above the proposal assumes the clearing of the entire extent of land gazetted for the proposed action, including areas in which early works are to occur. As locations for potential early works are determined, the proponent will notify the Department accordingly.



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Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

The Department of Transport and Main Roads (DTMR), as the Proponent, is highly experienced in the planning, delivery and operation of major transport infrastructure projects. DTMR's core role is the planning, building and maintaining of Queensland's road, rail, freight and maritime infrastructure.

DTMR has an excellent track record in coordinating environmental assessments and delivering environmentally sensitive transport solutions, evidenced through recent major infrastructure projects such as the Ipswich Motorway Upgrade, Eastern Busway, Northern Busway and Springfield and Moreton Bay Rail projects. Further information about DTMR's achievements, performance and outlook is available at www.tmr.qld.gov.au.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

Not Applicable

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☒ Yes ☐ No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

DTMR operates under the guiding principles of its Environmental Policy and Environmental Management System. The policy outlines how DTMR will management impacts on natural, human and cultural environments by:

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

DTMR undertakes works in accordance with their internal Environmental Processes Manual. Further information about the DTMR's environmental management is available at:

<http://www.tmr.qld.gov.au/Community-and-environment/Environmental-management>

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☒ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

DTMR have previously referred a variety of actions from across Queensland. Some South-East Queensland region examples include:

- EPBC 2008/4452 Bruce Highway, Cooroy to Curra, Section B.
- EPBC 2011/6024 Bruce Highway, Cooroy to Curra, Section A.
- EPBC 2012/6423 Upgrade of Smith Street Motorway (Eastbound Lanes and Interchange with Labrador-Carrara Rd).
- EPBC 2013/6815 Bruce Highway Realignment – Cabbage Tree Creek and Carman Road.
- EPBC 2013/7066 Gateway Upgrade North (GUN) Project (Nudgee Road to Bracken Ridge).
- EPBC 2013/7106 Underground Bus and Train Project, Brisbane.
- EPBC 2014/7392 Gold Coast Heavy Rail Duplication Project (Coomera to Helensvale).
- EPBC 2014/7394 Bruce Highway, Cooroy to Curra, Section C.
- EPBC 2015/7464 Bruce Highway Upgrade Caloundra Road to Sunshine Motorway.
- EPBC 2015/7558 Bruce Highway Overtaking Lane Adjustment near Bauple-Woolooga Road Intersection.
- EPBC 2015/7575 Gold Coast Light Rail Stage 2 (Land between Gold Coast University Hospital and Helensvale Heavy Rail Station).



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

- EPBC 2016/7683 Logan Enhancement Project.
- EPBC 2017/7941 Bruce Highway Cooroy to Curra (Section D: Woondum to Curra).
- EPBC 2017/7961 Cross River Rail Connecting Dutton Park to Bowen Hills.
- EPBC 2018/3854 Bruce highway Interchange Upgrades – Maroochydore Road and Mons Road.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

DEHP (2010) SPP Koala Habitat Values Mapping
DEHP (2014) Essential Habitat Mapping
Department of Environment and Science (DES) Wildlife Online.
EPA (2007) Southeast Queensland Biodiversity Planning Assessment
Queensland Globe
Regional ecosystem mapping Version 11
CoGC Vegetation Mapping
CoGC flora and fauna survey records database
CoGC City Plan Interactive Mapping
DEHP (2014) Matters of State Environmental Significance Mapping
DEHP Regional Ecosystem Description Database
Ryan, T.S. (2012). Technical Descriptions of Regional Ecosystems of Southeast Queensland. Queensland Herbarium, Department of Science, Information Technology, Innovation and the Arts. Brisbane.

Reliability

Queensland and Local Government data and source and therefore considered reliable.

Uncertainties

None

Reference source

Aecom (2010). Strategic Review of Environmental Factors - Road Corridor Development Planning (Intra Regional Transport Corridor – Northern Section).
Aecom (2011). Summary Report - Logan East Link Route Investigation Study.
Aurecon (2014). Gold Coast Light Rail Stage 2 Project - Ecology Technical Report.
Aurecon (2014). IRTC Planning Study Report (Gold Coast Light Rail Stage 2 Project).
Queensland Government (2017). Environmental Scoping Report - Intra-Regional Transport Corridor (IRTC) Northern Connection (Beenleigh-Redland Bay Road to Stapylton-Jacobs Well Road).

Reliability

Consultancy reports and studies developed to inform compliance with Commonwealth and Queensland approval processes. These studies have been undertaken by professional consultants who are qualified ecologists with practical experience. Methods followed during field surveys were in accordance with relevant guidelines published by State and Commonwealth departments. References that have been cited in preparation of this referral and supporting documentation (include databases and documents) have been produced and maintained by State and Commonwealth departments, and as such are considered highly reliable.

Uncertainties

The field surveys are based on conditions encountered and information reviewed at the date of preparation of the report. The opinions, conclusions and any recommendations in the field survey reports are based on information obtained from specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points. Investigations undertaken in respect of these reports are constrained by the site conditions, such as access restrictions and vegetation. Thus, not all relevant site features and conditions may have been identified. Site conditions may change after the date of preparation of these reports.

Reference source

Australian Wetlands Consulting (2009). Environmental Investigation Report – Ashmore Road Upgrade, Ashmore.
Australian Wetlands Consulting (2011). Ecological Assessment - Helensvale Waste Transfer Station.
Biodiversity Assessment and Management (2006). Fauna and Habitat Assessment - Helensvale to Molendinar.
Biodiversity Assessment and Management (2007). Terrestrial Flora and Fauna Assessment - Pimpama Waste Water Treatment Plant - Stage 2 Environmental Impact Statement.
Biodiversity Assessment and Management (2018). Terrestrial Ecological Assessment and Protected Plant Survey. New School, Coomera.
Biodiversity Assessment and Management (2018). Terrestrial Ecological Assessment (274-298 Foxwell Road, Coomera).
Biodiversity Assessment and Management (2009). Ecological Overview - Waterway Downs, Coomera.



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Reliability

Reports and studies developed to inform compliance with Commonwealth, Queensland and local government approval processes. These studies have been undertaken by professional consultants who are qualified ecologists with practical experience in surveying and monitoring the local environment. Methods followed during field surveys were in accordance with relevant guidelines published by State and Commonwealth departments. References that have been cited in preparation of this referral and supporting documentation (include databases and documents) have been produced and maintained by State and Commonwealth departments, and as such are considered highly reliable.

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Reference source

Biolink Ecological Consultants (2017). East Coomera Koala Population Study.
Biolink Ecological Consultants (2017). Parkwood-Coomababah Koala Population Study.
City of Gold Coast (2003). Coombabah Creek Environmental Inventory Report.
City of Gold Coast (2010). Coombabah – Parkwood Conservation Reserves Management Plan.
City of Gold Coast (2014). Lower Beechmont Conservation Area – Smith Street Offset Project.
Conics (2009). Southern Moreton Bay to Wongawallan Bioregional Corridor Study.
Connell Wagner (1995). The South Coast Motorway – Southern Section – Impact Assessment Study. Coomera Waters Village and Resort.
Gassman Development Perspectives (2013). EPBC Referral of Proposed Action (100 Amity Road, Coomera).
GCCC (2013) Koala Conservation Plan for East Coomera.

Reliability

Reports and studies developed to inform compliance with Commonwealth, Queensland and local government approval processes. These studies have been undertaken by professional consultants who are qualified ecologists with practical experience in surveying and monitoring the local environment. Methods followed during field surveys were in accordance with relevant guidelines published by State and Commonwealth departments. References that have been cited in preparation of this referral and supporting documentation (include databases and documents) have been produced and maintained by State and Commonwealth departments, and as such are considered highly reliable.

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Reference source

Griffith Centre for Coastal Management (2008). Shorebird disturbance on Gold Coast Beaches.
Griffith University (2006). Impact of Urbanisation on Coastal Wetlands - A Case Study of Coombabah Lake, South-east Queensland.
Habitat Environment Management (2009). Basic Ecological Site Assessment (298 Foxwell Road, Coomera).
Habitat Environment Management (2009). Detailed Ecological Site Assessment (Greenacre Drive, Arundel).
Habitat Environment Management (2010). Detailed Ecological Site Assessment (566 & 578 Foxwell Road, Coomera).
Habitat Environment Management (2014). Detailed Rehabilitation Management Plan - Gainsborough Greens (Yawalpah Rd, Pimpama).
Habitat Environment Management (2015). Conceptual Rehabilitation Management Plan - Gainsborough Greens (Yawalpah Rd, Pimpama).
Habitat Environment Management (2015). Detailed Ecological Site Assessment (486 Foxwell Road, Coomera).

Reliability

Reports and studies developed to inform compliance with Commonwealth, Queensland and local government approval



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processes. These studies have been undertaken by professional consultants who are qualified ecologists with practical experience in surveying and monitoring the local environment. Methods followed during field surveys were in accordance with relevant guidelines published by State and Commonwealth departments. References that have been cited in preparation of this referral and supporting documentation (include databases and documents) have been produced and maintained by State and Commonwealth departments, and as such are considered highly reliable.

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Reference source

Habitat Environment Management (2017). Detailed Ecological Site Assessment - Norman-Dee Springs, Stage 4 (Amity Road, Coomera).
Habitat Environment Management (2017). Detailed Ecological Site Assessment - Amity Road, Coomera (Lot 14 on SP216502; Lot 22 on SP216503; Lot 23 on SP174768).
Habitat Environment Management (2017). Fauna Management Plan - Norman-Dee Springs, Stage 4 (Amity Road, Coomera).
Habitat Environment Management (2017). Rehabilitation Management Plan - Norman-Dee Springs, Stage 4 (Amity Road, Coomera).
Habitat Environment Management (2017). Vegetation Management Plan - Norman-Dee Springs, Stage 4 (Amity Road, Coomera).
Halliburton (2004). EPBC Referral of Proposed Action. Coombabah Water Future Project.
Mark Rigby and Associates (2012). EPBC Referral of Proposed Action - Helensvale Waste Transfer Station Upgrade (70 Helensvale Road, Helensvale).
Oxbow Consulting (2001). Coomera Waters Estate Phase 2 – Fauna Impact Assessment.

Reliability

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Reference source

Planit Consulting (2012). Gold Coast International Marine Precinct - Environmental Impact Statement.
Planit Consulting (2013). Amended Open Space Management Plan - Coomera Waters Phase 3,
Planit Consulting (2013). Response to Information Request - OSRMP Coomera Waters Phase 3,
Planit Consulting (2014). Terrestrial Fauna Survey – Country Club Drive, Helensvale (Lot 100 on SP127602).
Planit Consulting (2014). Terrestrial Flora and Fauna Assessment - Hope Island Road, Helensvale (Lot 4 on SP201957; Lot 65 on SP109420).
Planit Consulting (2014). Terrestrial Flora and Fauna Assessment - EPBCA Species Coomera to Helensvale Rail Duplication Project.
Planit Consulting (2015). Preclearing Fauna Assessment & Management Plan (4 Oaky Creek Road, Coomera).
Planit Consulting (2016). Pre-clearing Fauna Assessment - Stage 28 Coomera Waters Residential Estate.
Planit Consulting (2016). Vegetation Clearing Report - Stage 28 Coomera Waters Residential Estate.



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Reference source

Planit Consulting (2017). Updated Preclearing Fauna Assessment and Management Plan (4 Oaky Creek Road, Coomera).
Queensland Parks and Wildlife Service (2005). Shorebird Management Strategy – Moreton Bay.
Queensland Wader Study Group (2009). Moreton Bay Regional Council Shorebird Habitat Mapping Project.
Saunders Havill Group (2015). Ecological Assessment Report – 109 Amity Road, Coomera.
Saunders Havill Group (2016). Ecological Assessment Report (Kerkin Road South, Coomera).
Saunders Havill Group (2017). Detailed Ecological Site Assessment. Australian Legend World (Nerang Broadbeach Road, Nerang).
SEQ Catchments (2012). Management and Restoration of Flying-fox Camps – Guidelines and Recommendations.
Urban Planning Services (2015). EPBC Referral of proposed action - 109 Amity Road, Coomera.

Reliability

Reports and studies developed to inform compliance with Commonwealth, Queensland and local government approval processes. These studies have been undertaken by professional consultants who are qualified ecologists with practical experience in surveying and monitoring the local environment. Methods followed during field surveys were in accordance with relevant guidelines published by State and Commonwealth departments. References that have been cited in preparation of this referral and supporting documentation (include databases and documents) have been produced and maintained by State and Commonwealth departments, and as such are considered highly reliable.

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Section 8
Proposed alternatives
Do you have any feasible alternatives to taking the proposed action? Yes ☒ No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action a member of an organisation?

☒ Yes ☐ No

Organisation

Organisation name Department of Transport and Main Roads
Business name
ABN 39407690291
ACN
Business address 36-38 Cotton St, Nerang, 4211, QLD, Australia
Postal address
Main Phone number (07) 5563 6600
Fax
Primary email address southcoast@tmr.qld.gov.au
Secondary email address

9.1.2 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

☐ Small business
☒ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations *

☐ Yes ☒ No

9.1.3 Contact

First name Paul
Last name Noonan
Job title Regional Director (South Coast Region)
Phone (07) 5563 6600
Mobile
Fax
Email southcoast@tmr.gov.qld.au
Primary address 36-38 Cotton St, Nerang, 4211, QLD, Australia
Address

Declaration: Person proposing the action,

I, PAUL NOONAN, 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.

Signature: [Signature] Date: 1/6/2020

I, PAUL NOONAN, the person proposing the action, consent to the designation of PAUL NOONAN as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: [Signature] Date: 1/6/2020



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent a member of an organisation?

☒ Yes ☐ No

Organisation

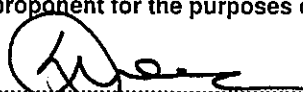
Organisation name	Department of Transport and Main Roads
Business name	
ABN	39407690291
ACN	
Business address	36-38 Cotton St, Nerang, 4211, QLD, Australia
Postal address	
Main Phone number	(07) 5563 6600
Fax	
Primary email address	southcoast@tmr.qld.gov.au
Secondary email address	

9.2.2 Contact

First name	Paul
Last name	Noonan
Job title	Regional Director
Phone	(07) 5563 6600
Mobile	
Fax	
Email	southcoast@tmr.qld.gov.au
Primary address	36-38 Cotton St, Nerang, 4211, QLD, Australia
Address	

Declaration: Proposed Designated Proponent

I, PAUL NOONAN, the
proposed designated proponent, consent to the designation of
myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:  Date: 1/6/2020



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)

9.3.1 Is the referring party (person preparing the information) a member of an organisation?

☒ Yes ☐ No

Organisation

Organisation name PLANIT CONSULTING PTY. LTD.
Business name
ABN 20099261711
ACN
Business address 2247 Gold Coast Hwy, Mermaid Beach, 4218, QLD, Australia
Postal address
Main Phone number (07) 55261500
Fax
Primary email address boyd@planitconsulting.com.au
Secondary email address laura@planitconsulting.com.au

9.3.2 Contact

First name Boyd
Last name Sargeant
Job title Director/Senior Environmental Planner
Phone (07) 5526 1500
Mobile
Fax
Email boyd@planitconsulting.com.au
Primary address 2247 Gold Coast Hwy, Mermaid Beach, 4218, QLD, Australia
Address

Declaration: Referring party (person preparing the information)

I, Boyd Sargeant, 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.

Signature:

Date:

30 MARCH 20.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A

Attachment

Document Type	File Name
action_area_images	MNES Assessment Report-Stage 1- Part 1.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 2.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 3.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 4.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 5.pdf
action_area_images	Attachment 1 - Referral Area Aerial.pdf
action_area_images	Attachment 2 - coomera connector stages.pdf
action_area_images	Attachment 3 - PMST.pdf
action_area_images	Attachment 4 - Species Profiles.pdf
action_area_images	Attachment 5 - Species Survey Period.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 10.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 11.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 12.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 13.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 14.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 1.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 2.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 3.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 4.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 5.pdf
public_consultation_reports	Attachment 6 - Flora Survey Effort.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 1.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 2.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 3.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 4.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 5.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 6.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 7.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 8.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 9.pdf
supporting_tech_reports	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 6.pdf
supporting_tech_reports	Attachment 9 - Flora Species List.pdf
supporting_tech_reports	Attachment 10 - Flora Survey Results.pdf
supporting_tech_reports	Attachment 11 - Fauna Survey Effort.pdf
supporting_tech_reports	Attachment 12 - Fauna Species List.pdf
supporting_tech_reports	Attachment 13 - Fauna Survey Results.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 1.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 2.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 3.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 4.pdf
flora_fauna_investigation	Attachment 15 - State and CoGC Corridor Mapping.pdf
flora_fauna_investigation	Attachment 16 - Likelihood of Occurrence Assessment.pdf
flora_fauna_investigation	Attachment 17 - Wetlands of Significance.pdf
flora_fauna_investigation	Attachment 18 - Direct Impact Maps part 1.pdf
flora_fauna_investigation	Attachment 18 - Direct Impact Maps part 2.pdf
flora_fauna_investigation	Attachment 19 - Potential Significant Impact Maps.pdf
flora_fauna_investigation	Attachment 20 - Significant Impact Assessments Part 1.pdf
flora_fauna_investigation	Attachment 20- Significant Impact Assessments Part 2.pdf
flora_fauna_investigation	Attachment 21 - WMS Priority Locations.pdf
flora_fauna_investigation	Attachment 22 - Fauna Corridor.pdf
hydro_investigation_files	Attachment 24- Conflict with EPBC Act Referrals.pdf
hydro_investigation_files	Attachment 26 - Aquatic MNES Assessment.pdf



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

hydro_investigation_files

Aquatic MNES Assessment Part 2.pdf

Appendix B
Coordinates
Area 1
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Appendix A

Attachment

Document Type	File Name
action_area_images	MNES Assessment Report-Stage 1- Part 1.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 2.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 3.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 4.pdf
action_area_images	MNES Assessment Report-Stage 1- Part 5.pdf
action_area_images	Attachment 1 - Referral Area Aerial.pdf
action_area_images	Attachment 2 - coomera connector stages.pdf
action_area_images	Attachment 3 - PMST.pdf
action_area_images	Attachment 4 - Species Profiles.pdf
action_area_images	Attachment 5 - Species Survey Period.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 10.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 11.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 12.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 13.pdf
govt_approval_conditions	Attachment 7 - Flora Survey Field Sheets Part 14.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 1.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 2.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 3.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 4.pdf
govt_approval_conditions	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 5.pdf
public_consultation_reports	Attachment 6 - Flora Survey Effort.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 1.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 2.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 3.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 4.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 5.pdf
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public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 7.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 8.pdf
public_consultation_reports	Attachment 7 - Flora Survey Field Sheets Part 9.pdf
supporting_tech_reports	Attachment 8 - Coastal Swamp Oak Forest Patch Condition Part 6.pdf
supporting_tech_reports	Attachment 9 - Flora Species List.pdf
supporting_tech_reports	Attachment 10 - Flora Survey Results.pdf
supporting_tech_reports	Attachment 11 - Fauna Survey Effort.pdf
supporting_tech_reports	Attachment 12 - Fauna Species List.pdf
supporting_tech_reports	Attachment 13 - Fauna Survey Results.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 1.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 2.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 3.pdf
supporting_tech_reports	Attachment 14 - Koala Records Part 4.pdf
flora_fauna_investigation	Attachment 15 - State and CoGC Corridor Mapping.pdf
flora_fauna_investigation	Attachment 16 - Likelihood of Occurrence Assessment.pdf
flora_fauna_investigation	Attachment 17 - Wetlands of Significance.pdf
flora_fauna_investigation	Attachment 18 - Direct Impact Maps part 1.pdf
flora_fauna_investigation	Attachment 18 - Direct Impact Maps part 2.pdf
flora_fauna_investigation	Attachment 19 - Potential Significant Impact Maps.pdf
flora_fauna_investigation	Attachment 20 - Significant Impact Assessments Part 1.pdf
flora_fauna_investigation	Attachment 20- Significant Impact Assessments Part 2.pdf
flora_fauna_investigation	Attachment 21 - WMS Priority Locations.pdf
flora_fauna_investigation	Attachment 22 - Fauna Corridor.pdf
hydro_investigation_files	Attachment 24- Conflict with EPBC Act Referrals.pdf
hydro_investigation_files	Attachment 26 - Aquatic MNES Assessment.pdf



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

hydro_investigation_files	Aquatic MNES Assessment Part 2.pdf
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Appendix B
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