Australian Government
Department of the Environment

Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
    - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
    - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

Can I refer part of a larger action?

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act).** If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from http://www.gbrmpa.gov.au/ or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379
Townsville QLD 4810
AUSTRALIA

Phone: + 61 7 4750 0700
Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

Instructions

Instructions are provided in blue text throughout the form.

Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the Department's website.

Payment of the referral fee can be made using one of the following methods:

- **EFT Payments can be made to:**

  BSB: 092-009
  Bank Account No. 115859
  Amount: $7352
  Account Name: Department of the Environment.
  Bank: Reserve Bank of Australia
  Bank Address: 20-22 London Circuit Canberra ACT 2601
  Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

  The Referrals Gateway
  Environment Assessment Branch
  Department of the Environment
  GPO Box 787
  Canberra ACT 2601

- **Credit Card**

  Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

How do I submit a referral?

Referrals may be submitted by mail or email.

Mail to:

Referrals Gateway
Environment Assessment Branch
Department of Environment
GPO Box 787
CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

Compliance audits

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park,*" p.2, for more details).

For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

Referral of proposed action

Project title: Eton Range Realignment Project, Peak Downs Highway, Queensland

1 Summary of proposed action

1.1 **Short description**

Realignment of the Peak Downs Highway (33B) along a section of the Eton Range, between Mackay and Nebo (the 'Eton Range crossing'). The proposal involves construction of a four-lane divided carriageway, a section of which utilises the existing road footprint. The Eton Range Realignment Project (ERRP) is part of the Peak Downs Highway Safety Package, funded by the Federal Government to support development in local townships, enhance productivity of existing and future mining operations in the Bowen Basin and Galilee Basin by addressing the effect of limitation in the region's freight transport network, and improve the safety and efficiency of the Peak Downs Highway.

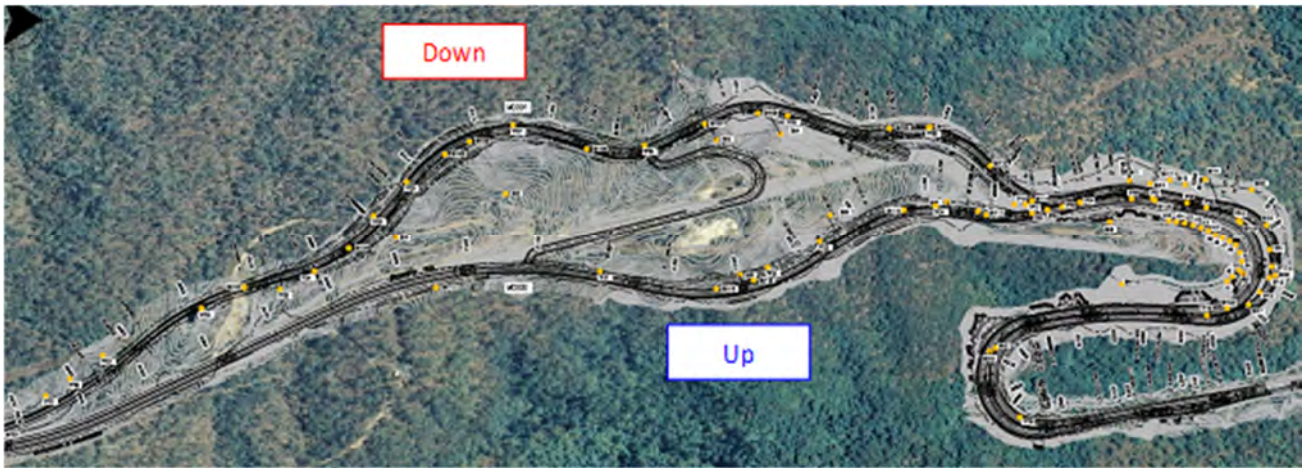

Figure 1 – Eton Range Realignment Project (ERRP)

1.2 **Latitude and longitude**

	Latitude			Longitude	
location point	degrees seconds	minutes	seconds	degrees	minutes

Refer to Attachment B.

1.3 **Locality and property description**

The project is located in Queensland DTMR's Mackay/Whitsunday District. The project will occur within the State-controlled road reserve of the Peak Downs Highway, on a section of the Eton Range, approximately 35 km south-west of Mackay, Queensland. Refer to Attachment C for a Location Map. The Eton Range is part of the Clarke-Connors Ranges sub-bioregion which extends 300 km, and is one of the largest wilderness areas in Queensland, with outstanding natural values (Reef Catchments, 2013). The extent of the Clarke-Connors Ranges sub-bioregion is shown in Attachment D. The Clarke-Connors Ranges sub-bioregion is part of the Central Queensland Coast Bioregion (IBRA).

Figure 2 – Peak Downs Highway – Existing Eton Range Crossing

1.4	**Size of the development footprint or work area (hectares)**	The development footprint is 59.46 hectares. It is noted that this is the area of new gazetted road reserve, and includes areas of vegetation that will be retained, as well as previously disturbed areas including 9.52 ha of areas cleared previously for survey, geotechnical and trial embankment works and 3.21 ha of areas cleared for site stockpiles, access and site sheds. In total, the ERRP project will result in the removal of 31.517 ha of vegetation. Between 28.73 and 31.19 ha is potential Koala habitat. 2.47 ha has been identified as area that <u>may</u> require clearing for construction Contractor's ancillary sites. Refer to Attachment E.
1.5	**Street address of the site**	Peak Downs Highway, Eton Range

1.6 **Lot description**

State-controlled Road Reserve DTMR

Any additional land adjacent to the existing Peak Downs Highway that is required for the project has been resumed under the *Land Act 1994* and *Acquisition of Land Act 1967* and forms part of the State-controlled Road Reserve.

1.7 **Local Government Area and Council contact (if known)**

The project is located within the Mackay Regional Council LGA.

1.8 **Time frame**

The construction of the Eton Range Realignment is scheduled to start in early 2016, with a construction period of approximately 2.5 years.

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1.9	**Alternatives to proposed action**		No
		X	Yes, you must also complete section 2.2
1.10	**Alternative time frames etc**	**X**	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	**State assessment** I	**X**	No
			Yes, you must also complete Section 2.5
1.12	**Component of larger action**	**X**	No
			Yes, you must also complete Section 2.7
1.13	**Related actions/proposals**	**X**	No
			Yes, provide details:
1.14	**Australian Government funding**		No
		X	Yes - Federal funding - $13.5 m for planning and design, and $170 m for construction.
1.15	**Great Barrier Reef Marine Park**	**X**	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

2.1 Description of proposed action

The proposed action is realignment of a section of the Peak Downs Highway through Spencer's Gap on the Eton Range – the 'Eton Range crossing' located between Mackay and Nebo. The range section has tight curves and a very steep grade (maximum 11%), rising 130 m in a little less than 1.5 km.

The scope of the works shall include the construction of two (2) dual lane carriageways, split carriageway, for approximately 1.7 km and the widening of the existing carriage to 4 lanes with 3 metre shoulders for approximately 1.2 km.

The works will involve major earthworks with geotechnically designed embankments over 30 m high and excavation to existing cut faces and current natural surface over 15 m. The project will contain all the normal elements of a road construction project including vegetation clearing, drainage, earthworks, placement of pavement, road furnishing, etc. Details provided below.

Figure 3 – Proposed New Peak Downs Highway Alignment

The construction sequence will generally entail the following activities –

- Progressive clearing of vegetation and ground preparation works along the alignment as required to accommodate construction activities. It is expected that all clearing will be completed within the first three months of works. –
  - Extent of clearing delineated on site by surveyors;
  - Spotter-catcher will identify and flag habitat trees. Further information regarding management of fauna, including Koalas, is provided in Section 4;
  - Installation of temporary fauna exclusion fencing at discretion of the fauna spotter-catcher;
  - Timber/logs with high habitat value will be stockpiled for relocation to natural areas adjacent to the project area;
  - Appropriate disposal and continuing management of declared and environmental weeds; and
  - Stripping of topsoil from the footprint of the earthworks formation as required. Topsoil suitable for use will be stockpiled on site.
- Installation of temporary erosion and sediment controls in accordance with Erosion and Sediment Control Plan developed by the Contractor and approved by DTMR as Principal;
- Installation of drainage infrastructure including 15 new drainage culverts ranging in size from 1/600RCP to 3/2100RCP with a Ø1800 corrugated steel pipe grouted centrally;
- General bulk earthworks which include approximately 400,000m^3 of road excavation and 80,000 m^2 of road embankment;

- Installation of complex longitudinal drainage systems in the centre median ranging in size from 1/450 RCP to 1/1500RCP, approximately 1 km long, with numerous branch pits and grated inlet pits;
- Excavation and concrete lining of an elaborate surface catch and batter drainage system to intercept and direct overland flow to controlled outlet points, over 3200 m^3 of reinforced concrete;
- Rehabilitation of approximately 950 m of existing roadway;
- Placement of 30,000m^3 of plant mixed pavement material and 15,000 tonnes of DG14 & DG20 asphalt;
- Spraying over 220,000 litres of bituminous primes, primerseals and seals;
- Installation of an elaborate barrier system which includes w-beam, thrie-beam and concrete barriers and other road furniture including road signs; and
- 6.4 hectares of landscaping and revegetation works, with approximately 4.0 hectares of 1:1 slope to stabilise and vegetate.

For construction of reinforced earth embankments, construction specifics include –

- Establishment of access track around hairpin;
- Progressive clearing. On the embankments, trees will be felled and stumps left in-situ to provide stabilisation of the upper slopes to allow construction to occur;
- Special earthworks with approximately 33,500 m^3 of bench excavation to the existing steep side slope to key in the placement of 188,000 m^2 of purposely processed embankment material. Embankments will be constructed from the bottom up;
- Based on geotechnical investigations, some blasting is likely to be required. This will occur in accordance with legislative requirements;
- Sorting, processing and blending materials to satisfy the material specifications within standard and RE embankments;
- Permanent drainage controls;
- Geogrid will be installed within the embankment in 600 mm increments;
- Landscaping will utilise ameliorated soil and Enkamat, overlayed with organic blanket. Enkamat is a permanent erosion prevention mat, and is used as an alternative to concrete, asphalt and stone riprap systems for controlling erosion; and
- Species selection for landscaping is based on sight lines and speed of establishment. A range of growth forms have been selected, dependant on the location.

Ancillary activities that will be required during construction will include –

- Establishment of site office (or offices);
- Clearing and stripping of access tracks;
- Establishment of stockpile and spoil areas;
- Establishment of laydown areas for construction materials;
- Crushing and screening of material sourced on site;
- Sourcing suitable construction materials; and
- Sourcing water for construction activities.

Post Construction –

- Landscaping and revegetation area maintenance and weed maintenance;
- Road maintenance, including drainage and pavement; and
- Construction site decommissioning.
- 12 months of fauna monitoring post-construction to monitor road strike.

2.2 Alternatives to taking the proposed action

The Peak Downs Highway Eton Range crossing has been the subject of significant adverse media coverage in relation to road safety and heavy vehicle traction and trafficability issues. Representatives of local heavy vehicle transport operators have been very vocal in communications with DTMR, political representatives and the media that the range urgently needs upgrading to address these issues. Their advocacy was one of the key factors in securing Federal Government commitment to participating in an initial planning study.

Figure 4 below identifies the existing deficiencies in the current alignment.

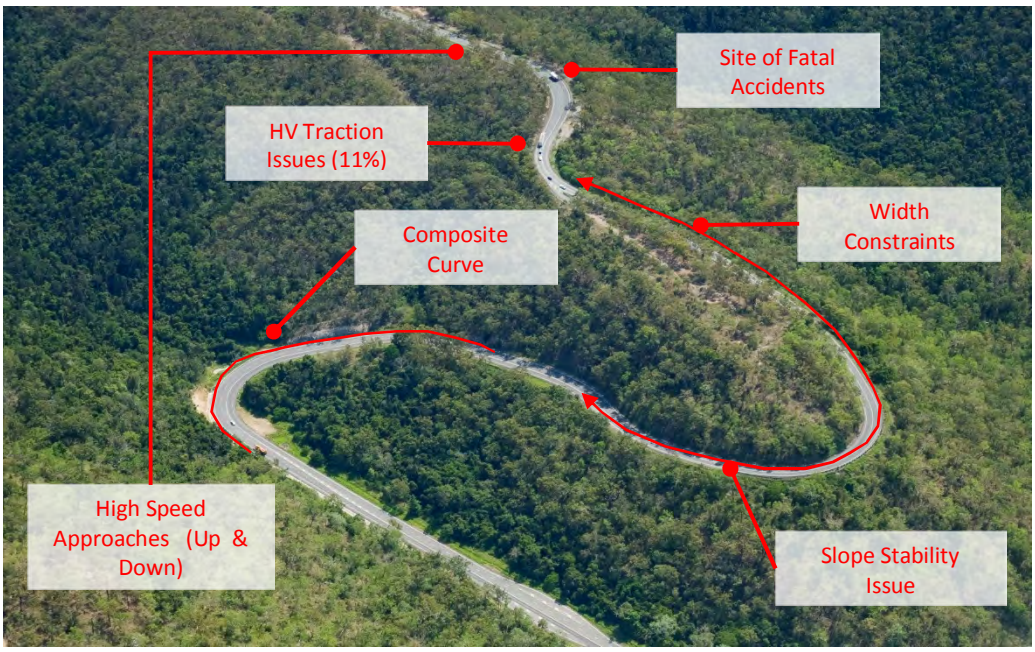

Figure 4 – Existing Deficiencies of the Current Eton Range Crossing

During development of the Business Case, the consequences of not undertaking the project were considered. It was determined that failure to address the deficiencies and constraints of the Eton Range crossing as overall traffic volumes and the number of OSOM vehicles increase would result in:

1. Worsening safety issues
   - Inappropriate alignment on the straight and steep southern approach to the first tight curve over the range preventing adequate braking time;
   - Steep vertical grades (up to 11%) and tight horizontal curvature resulting in loss of traction issues for heavy vehicles; and
   - Insufficient overtaking opportunities given the road geometry and the volumes of slow moving heavy and OSOM vehicles that can be a factor in driver loss of patience and excessive risk taking.

2. Decreasing travel time reliability
   - Traffic queuing behind very slow-moving vehicles crossing the range can be significantly delayed;
   - Loss of traction and the associated road closures leading to prolonged delays; and
   - Incremental travel time delays on the Peak Downs Highway for OSOM vehicles on the northern side of the Eton Range crossing, with restrictions at the Racecourse Road Sugar Mill (the conveyor belt passes over the Highway with a vertical clearance of 5.55 metres) and at the narrow load-limited timber Kirkup Bridge in Walkerston. Escorted OSOM vehicles that are not able to travel within these restrictions are required to find alternative routes; either from Mackay Port via Hampden, Marian and then via Eton to access the Bowen Basin mines: or for vehicles serviced at Paget, south on the Bruce Highway then west via Homebush Road to Eton. During delays some vehicles may use the lower standard local road network. All alternative route options significantly increase travel time and this is in addition to delays associated with Eton Range.

3. Adverse impacts on road freight transport efficiency with consequential negative impacts on economic growth
   - Poor operational efficiency from a slow speed crossing prone to delays;
   - Freight operators required to change combinations by de-coupling at the top of the range;
   - Regular daily closures for OSOM vehicles with adverse impacts on the efficiency of the link; and
   - Narrow road width and restrictions will continue to prohibit as of right access for vehicles larger than B-double combinations, that will forego potential improvements to freight efficiency, productivity and cost-effectiveness in the input supply chain were it accessible to B-triples or Type 1 road trains.

Figure 5 - Over Dimension Load on the Peak Downs Highway

If the proposed action was not undertaken, the limitations of the existing Peak Downs Highway Eton Range crossing would continue to cause safety issues, constrain the input supply chain to the Northern Bowen Basin coal industry and impose costs in terms of unreliable travel times, delays and road closures.

Therefore, not undertaking the works is not seen to be a feasible option.

2.3 Alternative locations, time frames or activities that form part of the referred action

During the Business Case phase, assessment of the deficiencies of the existing Eton Range crossing, in consultation with transport industry stakeholders, led to the definition of the following project objectives:

- Improving the safety of the road environment.
- Increasing the efficiency and reliability of the road network.
- Adequately servicing projected vehicle numbers and types.
- Providing horizontal and vertical geometry that allows efficient and safe use by road trains and over-dimensional vehicles.
- Minimising impacts upon the natural environment.

Alternative alignment options to meet the objectives of the project were investigated. The options investigated fell into two categories:

- New alignments in new corridors.
- Alignments within or in close proximity to the existing corridor, utilising as much of the existing roadway as possible.

Separate studies were undertaken for each category to investigate and develop a shortlist of options which best addressed the key objectives. Four options were shortlisted for detailed comparison - one new corridor alignment and three existing corridor alignments as follows.

1. A 5km long new corridor alignment, 800m west of the existing range crossing, with a 100km/h design speed and a maximum grade of 6%.
2. Four lanes offline at the top of the range to the west of the existing highway.
3. Four lanes offline at the top of the range to the east of the existing highway.
4. A split carriageway at the top of the range, with two lanes to the west for the downhill direction and two lanes to the east for the uphill direction. This is the option that was ultimately selected.

The alignment from the top hairpin to the bottom of the range was common to all three existing corridor options, incorporating the existing roadway into the upgraded solution.

The new corridor alignment option rated poorly against all of the feasibility and acceptability criteria and was rated as the least desirable option. This option is particularly complex from an execution perspective and has a significant impact on the existing environment and land-use. This alignment also introduces greater operational safety risk with light vehicles travelling at 100km/h and heavy vehicles below 60km/h in adjacent lanes.

The selected option (4) rated highest for its effectiveness in meeting the key project objectives of safety and transport efficiency. The feasibility of implementing this alignment solution was also superior to all other options, meaning it best accommodates constructability considerations and associated risks. Although the other existing corridor options rated better against the acceptability criteria due to their reduced footprint, the acceptability criteria are considered a lower priority compared to the need to deliver the key project objectives and the overall execution of the works. Throughout the Detailed Design phase, all efforts have been made to minimise the construction footprint.

2.4 Context, planning framework and state/local government requirements

The new alignment is to be constructed on land designated as State-controlled road under the Queensland *Transport Infrastructure Act 1994* (TIA) and *Local Government Act 2009* (LGA). Land acquisition under the *Acquisition of Land Act 1967* (ALA) has already been completed. An assessment of Native Title has been completed in accordance with Queensland Government Native Title Works Procedures, and a notification under Section 24KA of the *Native Title Act 1993* was carried out as part of the resumption process.

As a State-controlled road project, the project is exempt from assessment against a local government planning scheme under Schedule 9 of the Queensland Sustainable Planning Act 2009 (Qld). No formal approval process has been undertaken with Mackay Regional Council however as a major stakeholder, Mackay Regional Council have been extensively involved in the consultation process.

A detailed legislative assessment of the project is carried out by DTMR. State environmental permits, approvals and/or processes identified as required for the project include (but are not limited to):

- Requirements under the DTMR 'Protected Plant Exemption'[1] and 'Species management program for least concern fauna'[2] under the *Queensland Nature Conservation Act 1992* (NCA), including presence of a spotter-catcher on site during all clearing works;
- Site specific Species Management Program for Special Least Concern, and Colonial Breeding Species;
- Compliance with *Nature Conservation (Wildlife Management) Regulation 2006* for removal of protected plants.
- General environmental duty to minimise environmental harm under the *Environmental Protection Act 1994 (Qld)*; and
- Cultural heritage management requirements under the *Aboriginal Cultural Heritage Act 2003 (Qld)*.

Under Schedule 24 of the *Queensland State Planning Regulation 2009*, clearing of regulated vegetation is exempt from assessment as clearing is for a State-controlled road.

The works are not a 'prescribed activity' under Schedule 1 of the Queensland Environmental Offsets Regulation 2014 and therefore offset requirements under the *Queensland Environmental Offsets Act 2014* do not apply.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

This project does not trigger the need for an EIS under the *State Development and Public Works Organisation Act 1971* because the Coordinator General has not declared this Project to be 'coordinated project'. The environmental assessment process has been based on DTMR Technical Manual – Environmental Process Manual August 2013. A number of flora and fauna studies have been undertaken as part of route selection and design:

- November 2009/January 2010 Ecological Assessment Report Peak Downs Highway Realignment Eton Range Crossing – Ecological Survey and Management (Attachment F)

[1] *An approval for taking a protected plant in the course of an activity under a roads implementation program approved under section 11 of the Transport Infrastructure Act 1994 by the Chief Executive, Department of Environment and Heritage Protection* (May, 2013). Whilst amendments have been made to Queensland protected plant legislation, DTMR may operate in accordance with the Protected Plant Exemption (May 2013) until March 2016.

[2] *Species management program for tampering with animal breeding places under Section 88 of the Nature Conservation Act 1992 and Section 332 of the Nature Conservation (Wildlife Management) Regulation 2006* (May, 2013).

- June 2011 Eton Range Upgrade Project – Options W1A-W2A and X1A-X2A – Ecological Survey and Management (Attachment G)
- December 2013 Eton Range Realignment Project Fauna Assessment Report – Ecological Survey and Management (Attachment H)
- July 2015 Eton Range Realignment Project – Field Survey Report for Matters of National Environmental Significance (Attachment I)

The December 2013 Eton Range Realignment Project Fauna Assessment Report by Ecological Survey and Management (EcoSM) expanded on the results of the previous surveys by assessing the fauna values of the project area based on the final alignment, and addressing the vegetation mapping and threatened flora values. It is noted that no EVNT species have been identified on site.

In July 2015 further investigations of the MNES within the ERRP and surrounding area were undertaken, including additional Koala survey and updating existing likelihood of MNES using a revised Protected Matters Search Report (SMEC).

Environmental management considerations and requirements will be captured in the Environmental Assessment Report provided to the Contractor. Conditions of approval of the Species Management Program – Koala, and the DEHP approved Species Management Program – Special Least Concern and Colonial Breeding Species, will influence management measures detailed in contract documentation for significant fauna. Contractor will be required to comply with all approval conditions.

2.6 Public consultation (including with Indigenous stakeholders)

A planning study to determine the best means of improving the safety of the Eton Range began in 2008. This study was jointly funded by the Federal and State Governments. The study initially revolved around the possible location of a new alignment however it was necessary to investigate what improvements could be made to the existing alignment. DTMR sought input from a number of key stakeholders regarding current and future needs on both Eton Range and the Peak Downs Highway overall. The objective of this engagement was to clarify DTMR's understanding of the issues surrounding the Eton Range crossing and how these compared to other issues on the overall link.

DTMR undertook targeted stakeholder engagement to inform the planning phase. This included direct consultation with major transport and mine-support industry stakeholders to ascertain industry's views on current deficiencies and future requirements.

Directly affected property owners were also consulted in relation to the alternative alignments being evaluated. This included ongoing discussions about potential future acquisition of land and access to the realigned road corridor.

DTMR have continued ongoing public consultation with stakeholders (e.g. business and property owners, government agencies, regional council, emergency services, elected representatives, transport operators, service authorities) throughout the detailed design phase, in accordance with a Community Engagement Plan. Transport industry stakeholders engaged to date are all supportive of the stated project objectives. The majority view of the broader community as gauged by local media reports is also supportive of upgrading the existing Eton Range crossing. The key issue for general road users will be minimising disruption to traffic flow during construction.

DTMR will continue to engage with Wildlife Officers and Conservation Officers from DEHP and DNPSR during the Construction phase to facilitate post-construction monitoring and discuss installation of necessary structures to facilitate fauna movement.

<u>Indigenous Cultural Heritage</u>

This Department has a standard Cultural Heritage Process which provides sequential steps required to assess and manage all categories of Cultural Heritage.

In November 2009 a preliminary archaeological report was conducted to assess cultural heritage significance, based on the wider investigation area assessed during the options analysis phase.

A follow up survey was conducted in February 2012 to focus on the 'on-alignment' options that had been selected during options analysis. No specific values were identified within the report, however it was recommended that

Traditional Owners of the Country be involved to manage construction phase impacts and management of cultural heritage.

The Department continue to engage with the Traditional Owners regarding the status of the project, and to coordinate monitoring on site during tree clearing and earthworks, as per DMTR Cultural Heritage Processes.

2.7 A staged development or component of a larger project

The proposed action is not a staged development or component of a larger project.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

3.1 (a) World Heritage Properties

Description
The Pioneer River and Plane Creek discharge into the Great Barrier Reef Coast Marine Park, a World Heritage Property, approximately 40 km downstream of the project. Whilst there are no permanent watercourses within the project area, there are some ephemeral drainage lines which flow to larger creek systems in the Pioneer River and Plane Creek catchments during the wet season.

Nature and extent of likely impact

Bulk earthworks during the construction phase has the potential to generate sediments or pollutants which could be transported along ephemeral drainage lines during rain events, and into watercourses which are part of the Pioneer River and Plane Creek catchments. These catchments eventually discharge into the Great Barrier Reef Coast Marine Park.

Potential movement of disturbed sediment along drainage lines within the project area will be minimised through the design and implementation of temporary and permanent erosion and sediment control measures in accordance DTMR policies and Queensland legislation. A Sediment and Erosion Control Plan will be developed by the Contractor for the Construction phase, and will be in accordance with the *Best Practice Erosion and Sediment Control* document (IECA, 2008). Design solutions and tailored mitigation measures to counteract and contain potential environmental risks such as increased sedimentation and pollutants will be implemented at the source of any possible concern. This will be a mandatory requirement of the contract, and during the Construction phase sediment and erosion controls will be subject to continual inspection and compliance audits.

Given that there are no permanent watercourses within the project area, and that correct installation and management of temporary erosion and sediment controls will be a mandatory requirement of the construction contract, the risk of movement of sediment and pollutants to outside the project boundary will be minimal.

The Great Barrier Reef Coast Marine Park is approximately 40 km downstream of the project and it is highly unlikely that the project will have any impact on the Great Barrier Reef Coast Marine Park.

3.1 (b) National Heritage Places

Description
No National Heritage properties are located within or nearby the site. The Great Barrier Reef was listed on the National Heritage List on 21 May 2007. Refer to 3.1(a) above for discussion regarding nature and extent of likely impacts to the Great Barrier Reef.

Nature and extent of likely impact

N/A

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description
No Wetlands of International Importance (declared RAMSAR wetlands) are located within or near the project.

Nature and extent of likely impact

N/A

3.1 (d) Listed threatened species and ecological communities Description

Table 1 – Summary of Ecological Assessments Undertaken

Date	*Assessment Undertaken*	*Reference*
November 2009	Flora and fauna survey based on construction of a new carriageway to the west of the existing highway for a length of approximately 5km. Summary – • No Commonwealth listed fauna or flora species identified. No threatened ecological community recorded.	EcoSM 2009 (Attachment F)
June 2011	Flora and fauna assessment - co-joined and/or separate carriageways located in close proximity to the existing highway (not greater than 100 m from the centreline of the existing alignment). Summary - • No Commonwealth listed fauna or flora species identified. No threatened ecological community recorded.	EcoSM 2011 (Attachment G)
December 2013	Flora and Fauna Assessment – based on final alignment. Summary – • One Commonwealth listed fauna species (the Koala) was recorded during field surveys. • No Commonwealth listed flora species identified or threatened ecological communities recorded. ***It should be noted that this assessment was prepared prior to finalisation of detailed design. Vegetation clearing extents have since been revised – Refer to Attachment A***	EcoSM 2013 (Attachment H)
July 2015	Commonwealth listed threatened fauna species assessment – based on detailed design. Summary – • Koala Spot Assessment Technique surveys across 10 sites within and adjacent to the impact area (SMEC, 2015), indicated low Koala activity levels along the steep slopes within the northern end of the Project and medium and high activity levels at the southern lower grade end of the impact area. Activity levels range from 0 to 57%, averaging 24.3%. • Likelihood of other EPBC listed species was updated.	SMEC 2015 (Attachment I)

The most recent EPBC Act Protected Matters Report was generated on 29.07.2015 and has been included as Attachment J.

An updated search of the following online resources was also undertaken on 13.07.2015 to identify any additional species listed as threatened under the EPBC Act that have been recorded within the vicinity of the project area, and are not included on the EPBC Act Protected Matters Report:

- DEHP Essential Habitat Mapping
- DEHP Wildlife Online Database
- DLGIP Interactive Mapping – Matters of State Environmental Significance
- Atlas of Living Australia

No additional threatened flora or fauna species were identified in these search results.

<u>Threatened Ecological Communities</u>

The EPBC Act Protected Matters Report identified the following threatened ecological communities (TEC) as having the potential to occur within the vicinity of the project -

- Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin; and
- Broad-leaf tea-tree (*Melaleuca viridiflora*) woodlands in high coastal north Queensland.

Flora surveys have been undertaken by EcoSM in November 2009, June 2011 and December 2013. None of the vegetation assemblages identified in the areas surveyed have the characteristics of the ecological communities listed above, or are listed as threatened ecological communities under the EPBC Act.

Threatened Flora

The EPBC Protected Matters search (Attachment J) identified seven flora species as potentially occurring in a 20 km radial area surrounding the project area.

Flora surveys were undertaken by EcoSM in November 2009, June 2011 and December 2013. No flora species listed as threatened under the Commonwealth EPBC Act were identified during detailed flora surveys.

Table 2 – Likelihood of Occurrence Assessment for EPBC Act Threatened Flora Species (SMEC, 2015, adapted from EcoSM, 2011)

Species	EPBC	Habitat	Likelihood
Three leaved-Bosistoa *Bosistoa transversa / selwynii*	V	This species is known to grow in lowland subtropical rainforest up to 300m in altitude.	Low – The ERRP area is largely absent of lowland subtropical rainforest.
Black Ironbox (*Eucalyptus raveretiana*)	V	Black Ironbox occurs on the banks of rivers, creeks and moderate sized watercourses on clayey or sandy loam. It is often associated with *Melaleuca leucadendra* and/or *Melaleuca fluviatils* fringing open forest. Endemic to Central and North Queensland and known from Nebo to Ayr and Aps Creek to Rockhampton (Halford 1997).	Low - Suitable habitat absent. No records within the immediate vicinity.
Holly-leaved Graptophyllum *Graptophyllum ilicifolium*	V	The populations of this species are localised, within Mount Blackwood and Mount Adder national parks and Mount Jukes. The habitat consists of tall to very tall mixed notophyll forest.	Low – The ERRP is outside the identified localities of this species.
Omphalea celata	V	Occurs along watercourses with steep sided gullies on granitic or heavily weathered metamorphic soils. *O. celata* has also been recorded in semi-evergreen vine thicket and vine forest. *Omphalea celata* is known from three sites in central east Queensland - Hazlewood Gorge, near Eungella; Gloucester Island, near Bowen; and Cooper Creek in the Homevale Station area, north-west of Nebo (TSSC, 2008).	Low – There are three known locations in central east Queensland, the closest record being 42km east in Homevale National Park (Atlas of Living Australia, 2015). There is no suitable habitat within the ERRP area.
Lesser Swamp-orchid *Phaius australis*	E	The swamp-orchid is found in coastal wet heath/sedgeland wetlands, swampy grasslands or swampy forests. Populations are largely across southern Queensland, with one population known near Rockhampton (DoE, 2015).	Low – No suitable habitat within the ERRP area.
Native Moth Orchid *Phalaenopsis rosenstromii*	E	This orchid occurs in humid rainforest areas, near waterfalls or streams, on sheltered slopes or gullies in notophyll vine thickets, deciduous vine thickets or in open forest (DoE, 2015).	Low – No suitable habitat within the ERRP area.
Cycas ophiolitica	E	*Cycas ophiolitica* grows on hills and slopes in sparse, grassy open forest at altitude ranges from 80–400 m above sea level. It is often found on sandstone and serpentinite in shallow, infertile soils. *Cycas ophiolitica* is endemic to Queensland, occurring from Marlborough to Rockhampton in central-eastern Queensland (DoE, 2015).	Low - Outside known distribution of this species. Nearest record is 136km south of project area (Atlas of Living Australia, 2015). There is no suitable habitat within the ERRP area.

Threatened Fauna

The EPBC Act Protected Matters Report (Attachment J) lists 18 threatened fauna species (excluding migratory species) as potentially occurring in a 20 km radial area surrounding the project area.

EcoSM (2013) undertook a likelihood of occurrence assessment for Federal listed conservation significant fauna predicted to occur in the area.

Table 3 - Likelihood of Occurrence Assessment for EPBC Act Threatened Fauna Species (SMEC, 2015, adapted from EcoSM, 2013)

Species	EPBC	Habitat	Likelihood
Amphibians			
Eungella Day Frog *Taudactylus eungellensis*	E	Occurs in upland rainforest streams in the ranges west of Mackay, between Clarke Range and Finch Hatton Gorge. It inhabits exposed, steep sections within the splash zones of waterfalls and cascades (DoE 2015).	Low - This species is associated with streams in wet tropical rainforest, which do not occur within the ERRP area.
Birds			
Red Goshawk *Erythrotriorchis radiatus*	V	The Red Goshawk is generally found in open woodland, the edges of rainforest, and in dense riverine vegetation of coastal and subcoastal forests (Marchant and Higgins 1993). This species relies on tall trees for nesting and permanent water.	Low - The Red Goshawk may occasionally forage within the ERRP area, though the lack of permanent water suggest it is unlikely to nest in the area.
Australian Painted Snipe *Rostratula australis*	E	This species occurs in shallow, inland wetlands that are temporary or permanently inundated. This includes either fresh or brackish waters. It nests amongst vegetation near the waters edge.	Low – There is no suitable habitat for this species present in the ERRP area.
Squatter Pigeon *Geophaps scripta scripta*	V	This species inhabits open forests to sparse, open woodlands and scrub that contain *Eucalyptus, Corymbia, Acacia* or *Callitris* species and occur within 3km of water. These are typically remnant, regrowth of partly modified vegetation communities (DoE, 2015). It appears to favour sandy soil dissected with low gravely ridges and is less common on heavier soils with dense grass cover.	Low - This species may occasionally occur within the woodland vegetation types of the ERRP area, though the soil type is not typically sandy, as required by the species
Star Finch *Neochmia ruficauda ruficauda*	E	The Star finch occurs only in central Queensland, usually inhabiting low, dense damp grasslands bordering wetlands and waterways. In Queensland this species' range has largely contracted to the southern Cape York. There have not been any confirmed records from the Cairns to Townsville region for some time and none were recorded during the Birds Australia Atlas project (Higgins *et. al.* 2006).	Low – There is no suitable habitat within the ERRP area.
Black-throated Finch *Poephila cincta cincta*	E	This species typically occurs in dry, open grassy woodlands and forests containing *Eucalyptus, Corymbia* and *Melaleuca* species, generally in the vicinity of water (DoE, 2015). It is also thought to require a mosaic of different habitat in the wet season to find seed (Mitchell 1996). This species has undergone a significant range contraction from the southern parts of its former distribution. It has not been recorded in south-east Queensland since the early 80s and is now thought to be extinct in NSW (Higgins *et al.* 2006).	Low - The ERRP area contains limited suitable habitat for this species as the correct forests are present, though they are not within the vicinity of water. This species has not previously been recorded in any of the regional ecosystems present across the ERRP area.
Masked Owl *Tyto novaehollandiae kimberli*	V	This species occurs in riparian forests, rainforest, open forest, *Melaleuca* swamps and mangroves in northern Australia (DoE, 2015).	Low – Some vegetation is potentially suitable habitat for this species, however there

		It is thought to only occur in three main populations across the Kimberley, Northern Territory and Cape York (Garnett *et al.* 2011).	are no known records in the vicinity of the ERRP.
Mammals			
Northern Quoll *Dasyurus hallucatus*	E	The Northern Quoll is usually associated with dissected rocky escarpments but also known from eucalypt forest, sandy lowlands, grasslands, beaches and woodlands, around human settlement and occasionally rainforest. The areas where the Quoll persist in Queensland tend to be steep, rocky areas close to water that have not been recently burnt.	**Moderate** – Vegetation and the rocky escarpments within the ERRP area suggest for Northern Quoll to occur. This species has previously been sighted in the surrounding area.
South-eastern Long-eared Bat *Nyctophilus timoriensis / corbeni*	V	In Queensland, this species is mainly in the Brigalow belt south bioregion. It inhabits various woodland vegetation types, including box and ironbark.	Low - This species is generally not considered to occur as far north as Mackay. The ERRP is outside the Brigalow Belt bioregion.
Koala *Phascolarctos cinereus*	V	This species is widespread in Sclerophyll forest and woodlands on foothills and plains on both sides of the Great Dividing Range from about Chillagoe, Queensland to Mt Lofty ranges in South Australia (Menkhorst and Knight 2011).	**Present -** This species was recorded at three locations in the Study area in regional ecosystem (RE) 8.12.7. All areas of the Study area, except RE 8.12.3 are considered to provide habitat for this species.
Greater Large-eared Horseshoe Bat *Rhinolophus philippinensis (large form)*	E	This is restricted to a broad strip of coastal and near-coastal habitat in north-eastern Queensland from Iron Range on Cape York Peninsula south to Townsville. It may occur south of Townsville at Mt Elliot and Cape Cleveland. Habitat includes lowland rainforest along gallery forest-lined creeks within open eucalypt forest, *Melaleuca* forest with rainforest understorey and tall riparian woodland comprising *Eucalyptus tereticornis* and *Eucalyptus tessellaris* (DoE, 2015). Roosts in caves and possibly tree hollows, dense foliage and large bridge culverts (Van Dyck and Strahan 2008).	Low - The ERRP area is outside the known distribution of this species and there have been no records in the vicinity of the Project. Suitable habitat in the ERRP area is limited.
Grey-headed Flying-fox *Pteropus poliocephalus*	V	This species prefers forests with fruiting or flowering trees, and roosts in forest near water (including mangroves). Although the northern limit of the species range was previously thought to be Rockhampton, recent years have seen apparent range expansions as far north as Innisfail (CSIRO, 2015; DoE 2015.)	**Moderate** – Flowering trees, including winter flowering ironbarks, are present across the ERRP area which may be utilised for foraging. However water is not in close proximity to the site, therefore roosting is unlikely to occur.
Water Mouse *Xeromys myoides*	V	The Water Mouse is known in mangrove communities and adjacent sedgelands, grasslands and freshwater wetlands.	Low – There is no suitable habitat within the ERRP area.
Reptiles			
Yakka Skink *Egernia rugosa*	V	The Yakka Skink is a ground-dwelling reptile found in dry open forests, woodlands and rocky areas of the Brigalow Belt, landzones 9 and 10. It is often found under dead timber and in deep rock crevices (Wilson, 2005).	Low - This species is usually found further inland and from drier habitats.

Ornamental Snake *Denisonia maculata*	V	The Ornamental Snake is found in close association with frogs which form the majority of its prey. It prefers woodlands and open forests and Brigalow dominated vegetation communities. It is also associated with moist areas, particularly gilgai mounds and depressions with clay soils but is also known from lake margins, wetlands and waterways (DoE, 2015).	Low – There is no Brigalow or gilgai habitat present in the ERRP area.
White-throated Snapping Turtle *Elseya albagula*	CE	This species is found only in the Fitzroy, Mary and Burnett Rivers and tributaries of these. It requires clear, flowing and well-oxygenated waters (TSSC, 2014).	Low – There is no suitable habitat present in the ERRP area.
Fitzroy River Turtle *Rheodytes leukops*	V	Known from the Fitzroy River and its tributaries (Cogger 2000).	Low - There is no suitable habitat for this species within the ERRP area.

Koala (*Phascolarctos cinereus*) was recorded during surveys undertaken by EcoSM in December 2013 and SMEC in 2015.

No other species listed as threatened under the Commonwealth EPBC Act were identified during the terrestrial surveys in November 2009, June 2011 or December 2013, however it was determined that two other species have a moderate likelihood of occurring in the project area:

- Northern Quoll (*Dasyurus hallucatus)*
- Grey-headed Flying Fox (*Pteropus poliocephalus)*

Nature and extent of likely impact

Nature and extent of likely impact

Threatened Flora
The likelihood of occurrence assessment identified that EPBC Act threatened flora are unlikely to occur within the project area. This is based on the lack of observations during ecological assessments, including targeted flora survey, and assessment of habitat suitability

Threatened Fauna
Of those species returned from database searches for the search area, only one (the Koala) was recorded during field surveys. However, it was determined that two other species have a moderate likelihood of occurring in the project area:

- Northern Quoll (*Dasyurus hallucatus)* - Endangered
- Grey-headed Flying Fox (*Pteropus poliocephalus)* – Vulnerable

Northern Quoll
While habitat within the project area is considered potentially suitable for this species, and there are known records of the Northern Quoll within a 20 km radial area, this species would occur throughout more intact core habitat areas within the Eton Range and the Clarke-Connors Ranges sub-bioregion. The area impacted by this project is unlikely to support breeding habitat for this species due to the lack of specific habitat features, such as caves or permanent watercourses. Accordingly, in a regional context, the area does not form unique or important habitat for this species. This species was not assessed against the Significant Impact Guidelines, as the project area is not considered to provide important habitat for this species due to:

- Relatively small area of impact;
- Disturbed nature of the project area as a result of the existence of the Peak Downs Highway; and
- Extensive and more intact habitat to the east and west in the Eton Range, and larger Clarke-Connors Ranges sub-bioregion.

Grey-headed Flying Fox
Flowering trees, including winter flowering ironbarks, are present across the ERRP project area which may be utilised for foraging. However water is not in close proximity to the site, therefore roosting is unlikely to occur. Further, there are no known records within a 20 km radial area. The nearest active flying fox camp is within Finch Hatton Gorge, 50km north-west of the project area (DoE, 2015). Previous fauna surveys have not detected this species in the project area. For these reasons, this species was not assessed against the Significant Impact Guidelines.

During the construction phase, works can be undertaken in a manner that minimises injury or fatality to individuals (refer to Section 4) and there is a high confidence that any impacts to these species in the short and longer term would not be significant.

Koala
One species, the Koala (*Phascolarctos cinereus*), listed as Vulnerable under the Commonwealth EPBC Act, was recorded at three locations and heard calling during spotlighting activities (EcoSM, 2013). Two females and one male animal were observed in two Lemon Scented Gums (*Corymbia citriodora* var. *citriodora*) and one in a Broad-leaved Stringybark (*Eucalyptus portuensis*). All three animals observed were within RE 8.12.7 – Refer to Attachment H for vegetation community mapping. Calls of this species were also heard in adjacent areas during spotlighting activities during the field survey.

Further, Koala Spot Assessment Technique (KSAT) surveys across 10 sites within and adjacent to the impact area (SMEC, 2015), found no to low Koala activity (0% to 22.52%) along the steep slopes within the northern end of the Project and medium (22.53 - 32.84%) and high (>32.84%) activity levels at the southern end of the impact area, where the terrain was more gentle. The activity levels are closely aligned with localised topography. Within the ERRP area (the impact sites), three (3) KSATs were determined to have low use, one (1) had medium use while two (2) had high use. The control sites identified two (2) KSATs with low use, one (1) with medium use while one (1) had high use. One low activity site at each of the impact and control areas recorded a scat beneath 20% of trees, so they were close to the threshold of medium activity. This suggests that the Koala population extends across the ERRP area but also into adjacent habitat. Furthermore, it is likely that Koalas cross the existing Peak Downs Highway, given that scats were observed on both sides of the Highway. The important crossing points are

expected to be in the flatter sections of the Highway at the top of the range, where Koala activity levels were highest. Refer to Figure 1 of Attachment I.

There is potential for the Koalas that were identified to form part of an important population[3] in the region. All vegetation in the area provides suitable habitat for the Koala, except for the vine thicket community represented by RE 8.12.3. Refer to Table 4 for site vegetation community descriptions. A map of vegetation to be cleared is included in Attachment E.

Table 4 – Impact on Suitable Koala Habitat

Regional Ecosystem	Vegetation Community Description	Total Area Impacted* (ha)	Potential Koala Habitat
8.12.3	Evergreen to semi-evergreen, notophyll to microphyll, vine forest to vine thicket, of foothills and uplands on Mesozoic to Proterozoic igneous rocks	0.325	No
8.12.5	*Eucalyptus portuensis* and/or *Lophostemon confertus* and/or *E. exserta* and/or *Corymbia trachyphloia* and/or *E. fibrosa* open forest on Mesozoic to Proterozoic igneous rocks	31.192 ha	Yes
8.12.12	*Eucalyptus tereticornis* and/or *Corymbia spp*. and/or *E. platyphylla* and/or *Lophostemon suaveolens* woodland to open forest on hill slopes on Mesozoic to Proterozoic igneous rocks		Yes
8.12.7 (incl. 8.12.7c)	*Corymbia citriodora* +/- *Eucalyptus portuensis* +/- *E. drepanophylla* (or *E. crebra*) open forest on hill slopes and undulating plateaus, on Mesozoic to Proterozoic igneous rocks		Yes

Koala habitat loss and associated habitat fragmentation is the primary threat to Koala populations (Phillips, 1990). In total, the project will result in the direct removal of 28.727 ha – 31.192 ha of suitable koala habitat along a 3.5 km stretch of the Peak Downs Highway. Approximately 12.728 ha has been removed to date as part of survey, geotechnical works, access, and trial embankment works. This trial area was subject to significant previous disturbance from installation of Telstra and Ergon infrastructure, geotechnical investigations and survey. A Significant Impact Assessment for the Koala was carried out however the vegetation removal was carried out prior to publication of the 'EPBC Act referral guidelines for the vulnerable koala' and based on assessment against the previous EPBC significant impact guidelines where referral was not required. This area has been included within the project boundaries described within this referral as it will form part of the larger road construction project.

A small amount of clearing (approx. 1.5ha) for the establishment of additional access tracks/geotechnical trials was undertaken in early 2015 and was treated by DTMR as a non-conformance.

During the construction phase, works will be undertaken in a manner that avoids disturbance, injury or fatality of Koalas. Measures to mitigate impacts on the koala population are detailed in Section 4.

There is limited research on the impacts of construction and road traffic noise on Koala behaviour. Most fauna species exhibit a high degree of adaptability to noise and vibration emissions associated with construction. Some species will be deterred by noise, forgoing utilisation of habitat within close proximity to noise generating activities.

The installation of concrete barriers to prevent head-on collisions has the potential to inhibit Koala movement across the road and further contribute to mortality. However, the concrete barriers for this project will be installed in areas of the range with a steep gradient where speed limits will be restricted to 60 km/hr and where the Koalas are less likely to cross. Prevett et al. (1995) found that road kills occurred where vehicle speed exceeded 80 km/hr and where wider habitat corridors or linear forests occurred on both sides of the road. A large majority of the proposed road (Ch. 50,900 – 53,000 m northbound, Ch. 51,500 – 53,000 m southbound) will be restricted to 60 km/hr due to the steep and winding nature of the alignment. The important crossing points are expected to be in the flatter sections of the Highway at the top of the range, where Koala activity levels were highest.

A habitat appraisal was undertaken using the koala habitat assessment tool (DoE, 2014), The Koala habitat assessment tool assists with determining the sensitivity, value and quality of the project area, and whether it

[3] EcoSM, 2013 – The koalas that have been recorded in the study area have the potential to form part of a key source population for breeding or dispersal. Therefore, the animals that use habitat in the study area are potentially part of an important population.

contains habitat critical to the survival of the koala. Based on Section 3 of the referral guidelines, the project area was assessed using the 'Coastal' context of the koala distribution.

Table 5 – Complete koala habitat assessment tool

Attribute	**Score**	**Habitat Appraisal**	
Koala Occurrence	+2	Desktop	• EPBC PMST report identifies the Koala as "known to occur" in the Study Area • Qld Wildlife Online results (DEHP, 2015) show 18 records of the Koala within 20km of the impact area. • The Atlas of Living Australia has no records within the vicinity of the impact area.
		On-ground	• Line transect survey over 25 ha of habitat (EcoSM, 2013) identified 3 Koalas within the impact area. • Koalas were heard calling in adjacent areas during spotlight survey (EcoSM, 2013) • Koala Spot Assessment Technique surveys across 10 sites within and adjacent to the impact area (SMEC, 2015), indicated low Koala activity levels along the steep slopes within the northern end of the Project and medium and high activity levels at the southern lower grade end of the impact area. Activity levels range from 0 to 57%, averaging 24.3%.
Vegetation composition	+2	Desktop	• Regional Ecosystem Mapping (DEHP, 2015) indicates 3 of the 4 Regional Ecosystems contain Koala food trees: - RE8.12.12: *Eucalyptus tereticornis* and/or *Corymbia spp*. and/or *E. platyphylla* and/or *Lophostemon suaveolens* woodland to open forest on hill slopes on Mesozoic to Proterozoic igneous rocks - RE8.12.5: *E. portuensis* and/or *L. confertus* and/or *E. exserta* and/or *C. trachyphloia* and/or *E. fibrosa* open forest on Mesozoic to Proterozoic igneous rocks - RE8.12.3: Evergreen to semi-evergreen, notophyll to microphyll, vine forest to vine thicket, of foothills and uplands on Mesozoic to Proterozoic igneous rocks - RE8.12.7: *C. citriodora +/- E. portuensis +/- E. drepanophylla (or E. crebra)* open forest on hill slopes and undulating plateaus, on Mesozoic to Proterozoic igneous rocks • Aerial imagery for the site indicates that the vegetation is open forest or woodland with a closed canopy structure.
		On-ground	• Using the modified BioCondition methodology, habitat condition scores were established for 17 sites within the Study Area, representing each of the four REs occurring in the Study Area. The Study Area presented an average condition score. However, patches within REs 8.12.3, 8.12.5 and 8.12.7 represented relatively good condition. The average condition score for the Study Area is most likely a reflection of the existing disturbance within the Study Area, resulting from the existing Peak Downs Highway. • Vegetation composition determined during Koala SAT indicates the site is dominated by Koala food trees, including but not limited to *Corymbia citriodora var. citriodora, Eucalyptus drepanophylla, Eucalyptus exserta* and *Eucalyptus portuensis.*
Habitat Connectivity	+2	• The project area forms part of the Clarke-Connors Ranges sub-bioregion, a large connected landscape of remnant vegetation. • The size of the contiguous habitat landscape is approximately 200,000 ha, fragmented by the existing Peak Downs Highway.	
Key Existing Threats	+1	• Based on anecdotal evidence, the history of koala mortality from vehicle strike is not significant in the project location, particularly on steep parts of the range. However, there is some evidence of koala strike at the top of the Eton Range and it is likely that Koalas cross the existing Peak Downs Highway, given that scats were observed on both sides of the Highway. There is a known significant koala movement corridor 10 km south-west of the project area where a significant number of koala fatalities	

		have been recorded on a stretch of the Peak Downs Highway. However, based on Koala home range size (White 1999, Ellis et al. 2009, Mitchell 1990), it is unlikely that the Koala population in the Project Area would be crossing at that location. The important crossing points are expected to be in the flatter sections of the Highway at the top of the range (Ch 49,800 – 51, 200 m), where Koala activity levels were highest. • There is evidence of wild dogs on the Eton Range, however, no data regarding dog attacks is available for the project area. Given the density of koalas within and surrounding the project area, dog attacks are not considered a key existing threat to the population.
Recovery Value	+1	Habitat is not considered particularly unique in comparison to the wider study area. It is expected that the more intact and remote areas of the Clarke-Connors Ranges sub-bioregion provide more important habitat for this species. Removal of 30 ha of koala habitat along a 3.5 km stretch adjacent to the existing Peak Downs Highway will not significantly impact on the interim recovery objectives by destroying large, connected areas of koala habitat or reducing corridors and connective habitat.
Total	**8**	**Habitat is critical to the survival of the Koala (≥5). The action is likely to adversely affect habitat critical to the survival of the Koala (through removal of 28.727 ha – 31.192 ha of habitat containing known Koala food trees) and therefore referral is recommended due to the high risk of the action resulting in significant impact.**

A full assessment of the project against the Significant Impact Criteria is provided in Table 6. Reference has been made to Section 7 and 8 of 'EPBC Act referral guidelines for the vulnerable koala' in determining impacts of the project on the recovery of the species. Discussion of measures to reduce impacts is included in Section 4.

Table 6 – Significant impact assessment for Koala

Koala
Lead to a long-term decrease in the size of an important population of a species ***(No)*** Habitat removal is the main residual impact of the Project, with removal of 28.727 – 31.192 ha of suitable habitat along the 3.5 km stretch adjacent to the existing Peak Downs Highway. Fragmentation has been minimised by designing the new road adjacent to the existing to utilise existing disturbed areas. An isolated fragment will be created between the two separated carriageways for a distance of approximately 1.15 km. This fragment contains the existing Peak Downs Highway and associated disturbed vegetation. The installation of concrete barriers to prevent head-on collisions may inhibit Koala movement across the road and further contribute to mortality. However, the concrete barriers will be installed in areas with a steep gradient and where speed limits will be restricted to 60 km/hr and where the Koalas are less likely to cross. The important crossing points are expected to be in the flatter sections of the Highway at the top of the range, where Koala activity levels were highest. Prevett et al. (1995) found that road kills occurred where vehicle speed exceeded 80 km/hr and where wider habitat corridors or linear forests occurred on both sides of the road. A large majority of the proposed road (Ch. 50,900 – 53,000 m northbound, Ch. 51,500 – 53,000 m southbound) will be restricted to 60 km/hr due to the steep and winding nature of the alignment. It is not considered that the works will cause a long term decrease in the size of the important population. This is mainly due to the availability of suitable habitat on the Eton Range, and the wider Clarke-Connors Ranges bioregion.
Reduce the area of occupancy of an important population ***(Yes)*** The project will directly reduce the area of occupancy of the koala by 28.727 – 31.192 ha. The vegetation communities removed to facilitate the project are 'Least Concern' and occur extensively throughout the Clarke-Connors Ranges sub-bioregion. Therefore, the removal of 28.727 – 31.192 ha of habitat will reduce the area of occupancy within a contiguous habitat landscape of more than 200,000 ha by an insignificant percentage.

Fragment an existing important population into two or more populations ***(Possible)***

Original construction of the Peak Downs Highway fragmented the Eton Range habitat and created a potential barrier to movement. Construction of a split carriageway will further fragment the habitat and isolate a small fragment of disturbed vegetation.

A key north-south movement corridor has been identified approximately 10 km south-west of the project site on the Peak Downs Highway. However, based on Koala home range size (White 1999, Ellis et al. 2009, Mitchell 1990), it is unlikely that the Koala population in the Project Area would be crossing at that location. The important crossing points are expected to be in the flatter sections of the Highway at the top of the range (Ch 49,800 – 51, 200 m), where Koala activity levels were highest. In a regional context, and with consideration of the extent of suitable habitat on the Eton Range and the wider Clarke-Connors Ranges, while the project will exacerbate the current movement obstruction, it is not expected to completely fragment the healthy population of koalas that resides in the area.

Adversely affect habitat critical to the survival of a species ***(Yes)***

The project area has been identified as containing habitat critical to the survival of the koala, in accordance with the Koala Habitat Assessment Tool. The project will directly impact 28.727 – 31.192 ha of critical koala habitat. Surveys undertaken within the impact area and within surrounding habitat show moderate and high Koala activity along the flatter parts of the Study area and low activity along the steep slopes. It is expected that this is not unique to the area surveyed, but typical of the broader Eton Range, and Clarke-Connors Ranges sub-bioregion.

Disrupt the breeding cycle of an important population ***(No)***

The koala breeding season is generally between September and March, with females giving birth to a single young between October and May. The construction phase of the project will be carried out in a way that minimises direct impacts to individuals. For example, in the instance that koalas are identified during pre-clearance survey, an exclusion zone will be established to allow that animal to move from the area of its own accord, minimising disturbance and stress to the species. Clearing will be sequential and a fauna spotter catcher will be present for all clearing works.

During the breeding season, males actively seek female koalas and Koala movement is more extensive. The Project could lead to an increase risk of vehicle strike. Traffic volume, speed and visibility influence the Koala collision rate. Prevett et al. (1995) found that road kills occurred where vehicle speeds exceeded 80km/hr and where wider habitat corridors or linear forests occurred on both sides of the road. It is noted that a large majority of the proposed road (Ch. 50900 – 53000 m northbound, Ch. 51500 – 53000 m southbound) will be restricted to 60km/hr due to the steep and winding nature of the alignment. Further, this location is not a known corridor for movement along the range. The important crossing points are expected to be in the flatter sections of the Highway at the top of the range, where Koala activity levels were highest.

Options for the installation of fauna friendly road furniture were investigated during the design process. A number of sizeable culverts to be constructed as a part of the project have the potential to be used as fauna underpasses. Ecological surveys identified that Koala activity levels are highest along the flatter areas at the top of the range (SMEC 2015). There is a suitable culvert traversing the new highway in this area. In conjunction with the use of koala proof fencing, the size and configuration of the culvert is likely to facilitate movement of Koalas and ensure that they are able to safely traverse the new carriageway. Consultation has been undertaken with fauna crossing specialists concerning the potential construction of log culvert crossings through this structure, and the structure has been identified as a suitable candidate. Final location and design of the koala proof fencing and log culvert crossing will be decided in consultation with the specialists and installed during the construction phase.

Based on the mitigation measures described above, it is not expected that this project will significantly disrupt the breeding cycle of the local population.

Modify, destroy, remove or isolate, or decrease the availability or quality of habitat to the extent that the species is likely to decline ***(No)***

The project will impact on 28.727 – 31.192 ha of koala habitat adjacent to the existing Peak Downs Highway for a length of 3.5 km, which accounts for only a small area of suitable habitat in the broader landscape. Although clearing will cause minor additional fragmentation of habitat on the Eton Range and reduce the area of available habitat, the extent of linear habitat disturbance is not likely to decrease the availability or quality of habitat available to the local population to the extent that the species will decline.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species habitat ***(No)*** Invasive species, including feral animals such as the fox *(Vulpes vulpes)* and dog are likely to occur throughout the Eton Range, and Clarke-Connors Ranges sub-bioregion, including within and adjacent to the area surveyed. These types of predatory species are drawn to areas of disturbance to prey upon mammals and reptiles that are moving away from the disturbance area, therefore, predation by feral animals is a risk to this species during and immediately after clearing activities. Predatory species are also attracted to the prey opportunities presented by cleared linear corridors, although it is recognised that in this location, the linear corridor is already present in the form of the existing Peak Downs Highway. This project is considered unlikely to result in any new invasive species becoming established in habitat areas adjacent to the impact area, as these invasive and predatory species are already established throughout the wider landscape. There is evidence of wild dogs on the Eton Range, however given the location, no data regarding dog attacks is available. Given the density of koalas within and surrounding the project area, dog attacks are not considered a key existing threat to the population. There is potential for the spread of invasive weeds, such as Lantana, to occur during construction, degrading the habitat of the koala through the suppression of sapling growth. The implementation of weed management measures during the construction and maintenance phase will minimise impact of weed species on koala habitat quality of adjoining habitat areas.

3.1 (e) Listed migratory speciesDescription

The EPBC Protected Matters Search identified fourteen migratory species with potential to occur within the project area.

Table 7 - Likelihood of Occurrence Assessment for Migratory Species – EPBC Protected Matters Search (EcoSM, 2013)

Species	EPBC Act Status	Habitat	Likelihood
Migratory Marine Birds			
Fork-tailed Swift *Apus pacificus*	Migratory and Marine	Aerial over open habitat sometimes over forests and cities (Pizzey *et al.* 2012).	Low – The ERRP area does not contain suitable open habitat for this species.
Migratory Marine Species			
Saltwater Crocodile *Crocodylus porosus*	Migratory and Marine	Occurs in coastal waters, estuaries, freshwater sections of lakes, inland swamps and marshes in all coastal areas north of Rockhampton, west to King Sound (near Broome) in Western Australia (DoE, 2015).	No - The ERRP area does not contain suitable estuarine habitat for this species.
Migratory Terrestrial Species			
White-throated Needletail *Hirundapus caudacutus*	Migratory and Marine	Aerial over forests, woodlands, farmlands, plains, lakes and towns (Pizzey *et al.* 2012). Breeds in Asia.	**Moderate -** Likely to forage over the ERRP occasionally.
Barn Swallow *Hirundo rustica*	Migratory and Marine	Open forests, woodlands, grasslands, caves, ledges, offshore rocky islands, farmlands, grain stubbles, rail yards and towns, particularly near water. Occasionally roosts in old buildings. Is widespread in Australia and coastal islands (Pizzey *et al.* 2012).	Low – the ERRP area does not provide suitable open habitat or substantial waterbodies.
Rainbow Bee-eater *Merops ornatus*	Migratory and Marine	Woodlands, beaches, rainforest and mangroves (Pizzey *et al.* 2012).	**Moderate** - Suitable habitat is present in or immediately adjacent to the ERRP area.
Black-faced Monarch *Monarcha melanopsis*	Migratory and Marine	Rainforest, eucalypt woodlands and forest, coastal scrubs, rainforest gullies (Pizzey *et al.* 2012).	**High** – The ERRP area contains suitable habitat for this species.
Spectacled Monarch *Monarcha trivirgatus*	Migratory and Marine	Rainforest, thickly wooded gullies, waterside vegetation (Pizzey *et al.* 2012).	**Present** - This species was identified in the ERRP area during a bird survey in RE 8.12.3 (EcoSM, 2013).
Satin Flycatcher *Myiagra cyanoleuca*	Migratory and Marine	Heavily vegetated gullies in forests and taller woodlands and during migration coastal forests, woodlands, mangroves, gardens and open country (Pizzey *et al.* 2012).	**Moderate** – The ERRP area contains suitable habitat for this species, including heavily vegetated gullies.
Rufous Fantail *Rhipidura rififrons*	Migratory and Marine	Rainforest, wet eucalypt forests, monsoon forests, paperbarks, sub-inland and coastal scrubs, mangroves, watercourses, parks (Pizzey *et al.* 2012).	**Moderate** - All vegetated areas within the ERRP area provide potentially suitable habitat for this species.
Migratory Wetlands Species			
Great Egret *Ardea alba*	Migratory and Marine	Shallows of rivers, estuaries, tidal mudflats, freshwater wetlands, sewage ponds, larger dams (Pizzey *et al.* 2012).	Low – the ERRP area does not contain suitable habitat for this species.

Cattle Egret *Ardea ibis*	Migratory and Marine	Stock paddocks, pastures, croplands, garbage dumps, wetlands, tidal mudflats and drains (Pizzey *et al*. 2012).	Low – The ERRP area does not contain suitable habitat for this species.
Latham's Snipe *Gallinago hardwickii*	Migratory and Marine	Soft wet ground or shallow water with tussocks, wet paddocks, seepage below dams, irrigated areas, scrub or open woodland (Pizzey *et al*. 2012).	Low – The ERRP area does not contain suitable habitat for this species.
Eastern Osprey *Pandion haliaetus*	Migratory and Marine	Coasts, estuaries, bays, inlets, islands and surrounding waters, coral atolls, reefs and lagoons (Pizzey *et al.* 2012).	Low – The ERRP area does not contain suitable habitat for this species.
Marine Species			
White-bellied Sea-eagle *Hiaeetus leucogaster*	Marine	Coasts, islands, estuaries, large rivers, lakes and reservoirs (Pizzey *et al*. 2012).	Low – The ERRP area does not contain suitable habitat for this species.
Magpie Goose *Anseranas semipalmata*	Marine	Large seasonal wetlands and well vegetated dams with rushes and sedges, wet grasslands and floodplains (Pizzey *et al.* 2012).	Low – The ERRP area does not contain suitable habitat for this species.

Of those species returned from the EPBC Protected Matters Search, one, the Spectacled Monarch (*Monarch trivirgatus*) was identified within the wider study area, and the Black faced Monarch (*Monarcha melanopsis*) is considered to have a moderate likelihood of occurring with the project area. Further, the Satin Flycatcher (*Myiagra cyanoleuca),* White-throated Needletail (*Hirundapus caudacutus),* Rainbow Bee-eater (*Merops ornatus)* and Rufous Fantail (*Rhipidura rififrons*) are considered to have a moderate likelihood of occurring with the project area. All vegetated areas within the project area provide potential suitable habitat for these species.

Nature and extent of likely impact

The project will result in the potential loss of 31.517 ha of potential foraging habitat for the migratory terrestrial species. However, these species would occur throughout the Eton Range, and the Clarke-Connors Ranges sub-bioregion where an extensive area of more intact habitat is available. There is a high confidence that impacts to these species would not be significant. The significant impact assessment for the Spectacled Monarch (*Monarch trivirgatus*), Black faced Monarch (*Monarcha melanopsis*), Satin Flycatcher (*Myiagra cyanoleuca),* White-throated Needletail (*Hirundapus caudacutus),* Rainbow Bee-eater (*Merops ornatus)* and Rufous Fantail (*Rhipidura rififrons*) is detailed in Table 8.

Table 8 – Significant impact assessment for Migratory Species

Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species ***(No)*** The migratory terrestrial birds are highly mobile species. The majority of the habitat to be cleared is disturbed dry sclerophyll forest, and while these birds will forage within this habitat, they prefer to breed within moist gullies. The vegetation communities removed to facilitate the project are 'Least Concern' and occur extensively throughout the Clarke-Connors Ranges sub-bioregion. It is expected that the more intact and remote areas of the Clarke-Connors Ranges sub-bioregion provide more important habitat for these species. The removal of 28.727 ha – 31.192 ha of moderately disturbed habitat within a landscape of over 200,000 ha of contiguous habitat will not substantially modify, destroy or isolate an area of important habitat for migratory species.
Result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species ***(No)*** This project is considered unlikely to result in any new invasive species becoming established in habitat areas adjacent to the impact area, as these invasive and predatory species are already established throughout the wider landscape. There is potential for the spread of invasive weeds, such as Lantana, to occur during construction, degrading the habitat through the suppression of sapling growth. The implementation of weed management measures during the construction and maintenance phase will minimise impact of weed species on the quality of adjoining habitat areas. However, the more intact and remote areas of the Clarke-Connors Ranges sub-bioregion will provide more important habitat for these species than the disturbed habitat adjacent to the road.
Seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species ***(No)*** The majority of the habitat to be cleared is disturbed dry sclerophyll forest, and while these birds will forage within this habitat, they prefer to breed within moist gullies and the White-throated Needletail (*Hirundapus caudacutus)* breeds in Asia. Further, the migratory terrestrial birds are highly mobile species and the Project area is surrounded by extensive areas of similar habitat. It is not considered likely that the proposed action will disrupt the lifecycle of the species.

3.1 (f) Commonwealth marine area

Description

No Commonwealth marine areas are located within the proposed action area.

Nature and extent of likely impact

N/A

3.1 (g) Commonwealth land

Description
No Commonwealth land is located within the proposed action area.

Nature and extent of likely impact

N/A

3.1 (h) The Great Barrier Reef Marine Park

Description
The Great Barrier Reef Coast Marine Park is approximately 40 km east of the project. Refer to 3.1(a).

Nature and extent of likely impact

Refer to 3.1(a). It is highly unlikely that the project will have any impact on the Great Barrier Reef Coast Marine Park.

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description

N/A

Nature and extent of likely impact

N/A

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	**Is the proposed action a nuclear action?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment		

3.2 (b)	**Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment		

3.2 (c)	**Is the proposed action to be taken in a Commonwealth marine area?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))		

3.2 (d)	**Is the proposed action to be taken on Commonwealth land?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))		

3.2 (e)	**Is the proposed action to be taken in the Great Barrier Reef Marine Park?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))		

3.3 Other important features of the environment

3.3 (a) Flora and fauna

A total of 73 fauna species were recorded within the EcoSM survey area (2013). These included 3 amphibians, 53 birds, 9 mammals and 8 reptiles. No species listed under the Queensland *Nature Conservation (Wildlife) Regulation 2006* as 'threatened', meaning Extinct in the wild, Endangered, Vulnerable or Near Threatened, were observed during the field survey.

Based on the Wildlife Online records (EHP, 2015), there is one recorded sighting of *Macroderma gigas* (Ghost bat) - Vulnerable in the vicinity of the project area, and this species may potentially forage in suitable vegetated habitat within the project extents. This species is not likely to nest or roost within the project area due to a lack of suitable habitat features.

The Wildlife Online search (updated on 29 July 2015) confirms records of two other *Nature Conservation (Wildlife) Regulation 2006* 'threatened' species within a 20 km radial area of the project site - *Geophaps scripta scripta* (Squatter pigeon) – Vulnerable and Glossy-black Cockatoo (*Calyptorhynchus lathami erebus*) - Vulnerable. The Squatter Pigeon is also listed under the EPBC Act and is therefore discussed above in Section 3.1d.

A total of 311 flora species were recorded within the EcoSM survey area (2013). 51 of these were introduced. No EPBC Act threatened flora species, or Queensland 'threatened' flora species were observed.

The full list of observed species is provided in the EcoSM report included as Attachment H.

3.3 (b) Hydrology, including water flows

The topography of the project area and its surrounds is hilly and undulating. The Peak Downs Highway traverses a steeply sloped, north-running spur and associated gullies. The flanking terrain falls sharply to the west, north and east and includes steep slopes (>30%), low cliffs, steeply incised ephemeral gullies and valley floors.

There are no permanent watercourses within the project extents. A deeply incised ephemeral tributary of Cut Creek (Stream Order 1) dissects the Peak Downs Highway on the hairpin corner. Flows are conveyed through a 2/1600 Corrugated Steel Pipe (CSP) culvert. This culvert has some outlet protection works which have reduced scour in the downstream channel. The remaining drainage features are small, ephemeral drainage gullies with poorly defined channels. These ephemeral drainage lines flow to larger creek systems in the Pioneer River and Plane Creek catchments during the wet season. Mapping resources show the only named watercourse in close proximity to the project is Cut Creek, which flows under the Peak Downs Highway approximately 500 m north of the project area.

3.3 (c) Soil and Vegetation characteristics

The project area is described as hilly dissected plateau with crests to 1800-1900 ft above sea level on phyllites, slates, and shales; convex hill crests and moderate side slopes to narrow creek flats; soils are shallow and gravelly on crests and moderately deep and gravelly on slopes: chief soils are hard acidic yellow mottled soils.

Dominant soils are fairly shallow sandy to loamy soils with a stony A Horizon and a stone free B Horizon. Steeper hills have shallow stony loams.

Internal GIS dataset soilsRcea identifies the extent of DTMR soil groups which are defined and described in the DTMR Road Drainage Design Manual. Soils are defined as texture-contrast (Dispersive). Erosion and sediment control measures must be implemented and maintained through all phases of construction. Permanent erosion and sediment control measures have been developed as part of the Detailed Design phase.

The surveyed area lies within a large connected landscape of remnant vegetation, linking the important refuges of Spencer Gap Forest and Ben Mohr State Forest in close proximity, and the Crediton State Forest, Homevale National Park and Eungella National Park further west and north-west. The upper slopes and crest of the range supports dry sclerophyll woodland to open forest while closed scrubs to complex notophyll vine forest dominate the lower lopes and valley floor.

The level of weed disturbance was very high throughout much of the survey area and increased along the edges of the existing Peak Downs Highway and areas that have been cleared of remnant native vegetation for use as lay down areas, safety ramps, powerline easements, survey and geotechnical investigations etc. The cleared corridor and associated edge-effects degrade the overall quality of vegetation and habitat.

3.3 (d) Outstanding natural features

No outstanding natural features have been observed in the project area.

3.3 (e) Remnant native vegetation

The EcoSM Flora and Fauna Assessment in 2011 (Attachment G) and Fauna Assessment in 2013 (Attachment H) included field verification of Queensland regional ecosystem mapping. Field investigations revealed that the vegetation mapping for the area was a relatively accurate reflection of the vegetation communities present, with the exception of RE8.12.5, which was found to be markedly overrepresented.

Despite the level of fragmentation, all of the vegetation communities that were identified within the survey area align with remnant REs that have a VM Act Vegetation Management status of 'Least Concern' and Biodiversity status of 'least concern'. A total of four 'Least Concern' REs were identified. RE 8.12.5 is endemic to the sub-region (Clark-Connors Range province) while the other three REs occur ubiquitously upon ranges, hills and/or footslopes throughout the Central Queensland Coast bioregion. Based on the distribution of the four field-validated REs within the Clark-Connors Range sub-bioregion of the Central Queensland bioregion, it is clearly evident that these vegetation types are well distributed and conserved within the bioregion and have undergone only minor reductions in extent since European settlement (EcoSM, 2011).

Table 9 – Field validated vegetation communities (EcoSM, 2011)

Regional Ecosystem	Short Description	Vegetation Management Status	Biodiversity Status	EPBC Status
8.12.3	Notophyll rainforest / microphyll rainforest often with *Argyrodendron polyandrum* (Booyong) and *Paraserianthes toona* (Mackay Cedar), +/- *Araucaria cunninghamii* (Hoop Pine), on low to medium ranges on Mesozoic to Proterozoic igneous rocks	Least Concern	No concern at present	*Not applicable*
8.12.5	*Corymbia intermedia* (Pink Bloodwood), *E. portuensis* (White Mahogany) +/- *Lophostemon spp.* +/- *Syncarpia glomulifera* (Turpentine) +/- *Banksia integrifolia* (Coast Banksia), open forest on Mesozoic to Proterozoic igneous rocks	Least Concern	No concern at present	*Not applicable*
8.12.7 (incl. 8.12.7c)	*Corymbia citriodora* (Lemon-scented Gum) +/- *Eucalyptus portuensis* +/- *E. drepanophylla* (Narrow-leaved Ironbark) (or *E. crebra*) open forest to woodland on hillslopes and undulating plateaus, on Mesozoic to Proterozoic igneous rocks	Least Concern	No concern at present	*Not applicable*
8.12.12	Variable Corymbia spp. +/- *Eucalyptus tereticornis* (Queensland Blue Gum) +/- *E. platyphylla* (Poplar Gum) +/- *E. drepanophylla* +/- *E. portuensis* woodland on lower and mid-slopes of ranges on Mesozoic to Proterozoic igneous rocks	Least Concern	No concern at present	*Not applicable*

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)
Not Applicable

3.3 (g) Current state of the environment
The vegetation fringing the existing highway was found to be moderately fragmented in parts due to the presence of historic and current disturbance areas. Approximately 12.728 ha has been removed to date as part of survey, geotechnical works, access, and trial embankment works. This trial area was subject to significant previous disturbance from installation of Telstra and Ergon infrastructure, geotechnical investigations and survey. A small amount of clearing (approx. 1.5ha) for the establishment of additional access tracks/geotechnical trials was undertaken in early 2015 and was treated by DTMR as a non-conformance.

The distribution of exotic flora was generally commensurate with the level of disturbance. The majority of recorded exotic flora species were grasses and herbs. The distribution of declared pest species within the study area was mostly restricted to small infestations or individual specimens. Significant areas of Lantana (*Lantana camara)* were observed across the western side of the existing Peak Downs Highway as well as upon the steep slopes to the north of the range crossing. In general these slopes were found to be heavily degraded and in poor overall condition.

Two exotic fauna species were identified in the project area. One of these, the Wild Dog/Dingo is listed as a Class 2 declared species under the Queensland *Land Protection (Pest and Stock Route Management) Act 2002*. Other declared species are likely to occur in the Study area and broader landscape.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values
The proposed area is not recognised as a Heritage Place under Commonwealth, State or local government legislation.

There is a rock wall abutment that would have supported a bridge crossing on the old Cobb & Co. route on the northern edge of the remnant vine forest on the southern side of the highway (S21o 20′ 07.7″ E148o 56′ 24.8″). The scope of project works involves replacement of the drainage structure adjacent to this feature. The Contractor is required to detail management measures in the Environmental Management Plan (Construction) to ensure the abutment is not damaged during drainage works. DEHP confirmed in June 2015 that this feature is not a likely source of Queensland history and registration on the Heritage Register is not required.

Figure 6 Historical abutment (EcoSM, 2011)

3.3 (i) Indigenous heritage values
DTMR is committed to meeting its statutory Cultural Heritage, 'Duty of Care' and other responsibilities by working in partnership with Indigenous people and the wider community to maintain and protect the Indigenous and Historical Cultural Heritage values of specific places as well as objects significant to Indigenous cultural tradition.

Assessment of Cultural Heritage Values of the project area undertaken by Northern Archaeology Consultancies with the assistance of the Traditional Owners of the area Mr Gary Mooney (Yuwibara Elder) and Mr Graham Sauney (Wiri Elder). The study concluded that although there were no cultural heritage sites identified within the realignment area, the project area is located within a rich cultural landscape.

As per report recommendations, DTMR are working with the Traditional Owners to ensure that monitors are on site for all initial clearing and topsoil excavation; and that where cultural heritage sites or materials are discovered during excavations, work at that particular location will cease and continue at another location until Traditional Owners are contacted.

DTMR are working with the Traditional Owners to ensure cultural heritage values of the area are managed and protected.

3.3 (j) Other important or unique values of the environment
No other important or unique values of the environment are present in the proposed action area.

3.3 (k) Tenure of the action area (eg freehold, leasehold)
Land resumptions have been completed for areas outside the existing State-controlled road reserve. A second resumption process is currently underway for a minor increase to the areas previously resumed. All works will be within State-controlled road reserve.

3.3 (l) Existing land/marine uses of area
The tenure of land resumed adjacent to the existing Peak Downs Highway road reserve was a combination of freehold land, unallocated state land and State Forest.

3.3 (m) Any proposed land/marine uses of area

No future use of the area is currently proposed.

4 Environmental outcomes

As noted previously the proposed action will result in the loss of between 28.727 – 31.192 ha of Koala habitat. The extent of clearing has been identified with a high degree of reliability and accuracy through the detailed road design process. These details are included as Attachment E. The level of Koala usage and activity within the activity footprint and immediate surrounds has been established through baseline survey for Koala (EcoSM 2013, SMEC 2015). This baseline survey data is attached as Attachment H and I. Outside the areas covered in these baseline surveys the koala population in the Eton Range area has not studied in great depth. Based on the existing levels of information the following environmental outcomes are suggested for the Koala population which will potentially be impacted by the proposed action:

1/ Prior to the commencement of the activity all mitigation measures currently proposed (See Section 5 for detail) will be incorporated in the proposed road design and construction contract.

2/ If the proposed action is determined to be a Controlled Action, prior to the commencement of clearing activities, an offsets proposal will be provided to the Department of Environment.

3/ Within 9 months of the commencement of clearing activities, an offset agreement resulting in an identifiable conservation gain for the Vulnerable Koala will be agreed.

4/ Within 15 months of the commencement of clearing activities, the agreed offsets package will be implemented.

It is recognised that the currently available level of information may be insufficient to inform the proposed outcomes in full and that additional investigation and discussion with the Department may be required to develop these outcomes.

5 Measures to avoid or reduce impacts

It has been identified through the assessment of potential impacts to the Koala, that specific measures are required to be implemented to reduce the risk to the existing population within the area, including risks to potential habitat.

Options for the installation of fauna friendly road furniture was investigated during the design process. A number of sizable culverts to be constructed as a part of the project have the potential to be used as fauna underpasses. Ecological surveys undertaken in 2013 and 2015 identified that the flatter areas at the top of the range are where Koala activity levels are highest (SMEC 2015). There is a suitable culvert traversing the new highway in this area. In conjunction with the use of koala proof fencing, the size and configuration of the culvert is likely to facilitate movement of Koalas and ensure that they are able to safely traverse the new carriageway. Consultation has been undertaken with fauna crossing specialists concerning the potential construction of log culvert crossings through this structure, and the structure has been identified as a suitable candidate. Final location and design of the koala proof fencing and log culvert crossing will be decided in consultation with the specialists and installed during the construction phase.

DTMR have also proposed post-construction Koala monitoring along the proposed alignment. Records will be kept of any koala injuries or deaths on the realigned section of the Peak Downs Highway. This record will be maintained for at least 12 months to ensure data collected includes a full breeding season, where Koala movement is more extensive. Information will be gathered from DTMR Inspectors, local wildlife carers, and Rangers within DEHP. If there are points of conflict along the road, DTMR will work with DEHP and any other interested stakeholders to determine the most effective ways of managing the issue. DTMR will also discuss installation of other fauna movement infrastructure post-construction, to mitigate impacts of habitat fragmentation.

Mitigation measures during construction include:

- Induction of site personnel of responsibilities in complying with the protection of flora and fauna;
- Site inspection and installation of temporary fauna exclusion fencing as directed by fauna spotter-catcher;
- Clearing operations are to be undertaken in accordance with DTMR Standard Specifications and Contract Annexures, and any relevant conditions of approval.
- Carrying out clearing in stages, with no more than 3 ha cleared in any one stage;

- Sequential clearing in a direction away from disturbed/cleared areas, and towards vegetation to be retained to ensure fauna is not pressured to cross through construction areas or the Peak Downs Highway. This will ensure any less mobile fauna are able to move to other areas of suitable habitat. Where possible, clearing will start from an existing cleared site and will not fragment patches of habitat.
- Ensuring that between each stage, there is at least one period of 12 hours (6 pm – 6 am) during which no trees are cleared on site;
- Survey of the disturbance footprint by suitably qualified fauna spotter-catchers the day prior to clearing for the presence of koalas and evidence of recent koala habitation. Tagging and GPS coordinates of any trees with resident koala;
- Where koalas are encountered within the disturbance footprint on the day of clearing, the tree will be flagged and a 30 m exclusion zone will be introduced around the tree/s and a strip of vegetation leading to the edge of the disturbance footprint will be left untouched until such time as the koalas have moved away from the works area. At no time will a tree in which a koala is present, or a tree with a crown overlapping a tree in which a koala is present, be cleared;
- Continual surveillance of Koalas present on site is required for the duration of clearing operations. Spotter catchers will be working on foot alongside operators during all clearing works, and will oversee the operation;
- Maintaining appropriate habitat links during clearing, and utilising fauna friendly exclusion fencing, to allow koalas to move out of the site;
- Any tree identified by the Spotter catcher as being a risk to Koalas of felled, should not be felled, damaged or interfered with until the Koala has moved from the felling site of its own accord.
- If a Koala is injured during clearing, works will cease and the Koala will be inspected by the fauna spotter catcher to assess the extent of injury and determine appropriate treatment. Where injury is considered to be minor (for example, a minor abrasion) and the animal is otherwise alert and active, the animal may be released to reduce stress. If the animal is suffering more extensive injuries, it will be immediately transported to:
    - Name Valley Vet Surgery
    - Phone 4959 2099
    - Address 14 Dutton St, Walkerston QLD 4751

- In the event that a wildlife carer is required, Australian Wildlife Rescue Services will be contacted:
    - Name Yvette Getts, Australian Wildlife Rescue Services
    - Mobile 0447 543 268
    - Address PO Box 6687, Mackay QLD 4741

- Where the Contractor observes conflicts between pest animals and native fauna, such as koalas, DTMR will be notified immediately and will liaise with DEHP and the fauna spotter-catcher regarding management measures.
- Records of injured or killed fauna will be referred to DEHP.
- It is noted that, whilst Policy 6 (Vegetation Clearing Practices) of the Queensland *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016* is not applicable under the legislation to projects outside south-east Queensland, the provisions relating to how Koala habitat trees are to be cleared are considered to be best practice and as such, should be applied, to ensure injury or harm to individuals is limited to the greatest extent possible. The mitigation measures for clearing are consistent with those in Policy 6.
- Rehabilitation and landscape works will be undertaken as construction progresses. Works will utilise endemic species. Species selection is based on sight lines and speed of establishment. A range of growth forms will be utilised, dependant on the location.

These mitigation measures have been included in the Species Management Program – Koala (Fauna Management Program – Koala included as Attachment L).

Further to the above mitigation measures, the following management plans will be developed and implemented during construction to contribute to the protection of vegetation, habitat and water quality values –

- Environmental Management Plan (Construction) – to incorporate the above mitigation measures pertaining to fauna, flora and habitat, along with additional measures pertaining to erosion and sediment control, waste management, contaminant management, air and noise management, site personnel training, cultural heritage management and so on.

- The EMP(C) will incorporate any additional mitigation measures detailed within the approved Species Management Program and any relevant conditions of approval from DEHP and DoE within a specific Flora and Fauna Management Plan.
- The EMP(C) will include a Sediment and Erosion Control Plan to manage the movement of sediment from construction works and minimise impacts on water quality. The EMP(C) will also include a Weed and Pest Animal Management Plan to reduce degradation of habitat through weed and pest infestations, and/or predation on fauna species. Where the Contractor observes conflicts between pest animals and native fauna, DTMR will be notified immediately and will liaise with DEHP and the fauna spotter-catcher regarding management measures.
- Contractor monthly reports summarising compliance
- Regular DTMR compliance audits.

6 Conclusion on the likelihood of significant impacts

6.1 Do you THINK your proposed action is a controlled action?

	No, complete section 5.2
x	Yes, complete section 5.3

6.2 Proposed action IS NOT a controlled action.

6.3 Proposed action IS a controlled action

	Matters likely to be impacted
	World Heritage values (sections 12 and 15A)
	National Heritage places (sections 15B and 15C)
	Wetlands of international importance (sections 16 and 17B)
x	Listed threatened species and communities (sections 18 and 18A)
	Listed migratory species (sections 20 and 20A)
	Protection of the environment from nuclear actions (sections 21 and 22A)
	Commonwealth marine environment (sections 23 and 24A)
	Great Barrier Reef Marine Park (sections 24B and 24C)
	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

- Assessment of the proposed activity against using the koala habitat assessment tool has resulted in a habitat score of 8 which indicates the proposed action exceeds the benchmark value of habitat that is critical to the survival of the Koala (≥5).

- The action is likely to adversely affect habitat critical to the survival of the Koala (through removal of 28.727 ha – 31.192 ha of habitat containing known Koala food trees) and therefore there is a high risk of the action resulting in significant impact.

- Other impacts such as vehicle collision remain a threat to Koala in the area however, the road construction project is unlikely to result in significant increases in traffic volume and speeds, so will not result in a worsening of the existing situation. Installation of fauna movement structures as part of the road upgrade are likely to result in a net improvement to this particular impact.

7 Environmental record of the responsible party

		Yes	No
7.1	**Does the party taking the action have a satisfactory record of responsible environmental management?** **Provide details** To date, DTMR has successfully met its 'Duty of Care' to the environment, as per Section 319 of the Queensland Environmental Protection Act 1994. Environmental impact minimisation and mitigation measures are implemented for all project and these requirements are communicated to relevant parties through a number of processes and documents including: Environmental Management Plans, contract documentation, and toolbox talks on site. All of these documents are also utilised during audits to ensure documented processes are implemented on the ground, and where there are discrepancies, DTMR and its Contractors are responsible parties to understand these shortfalls and rectify these situations, where appropriate. It is also in DTMR's best interest, as a good corporate citizen, to rectify any breaches in environmental processes within short timeframes. In addition, if unforeseen circumstances do arise and unexpected environmental impacts are experienced, DTMR and its Contractors have and are willing to rectify such situations to ensure minimal damage is done, as well as restoration of the environment in accordance with DTMR procedural instructions or direction given by the responsible environmental agency (IE. Queensland DEHP).	x	
7.2	**Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?** **If yes, provide details**		x
7.3	**If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?** **If yes, provide details of environmental policy and planning framework** DTMR has recognised a need for environmental compliance as part of its core business, having established an Environmental Management System. DTMR's environmental policy and planning framework forms a functional role in the environmental assessment of our projects and business. This framework flows down from the Department's Strategic Plan which required DTMR business to undertake "environmental management to support environmental conservation" through to corporate policies, strategies and documents. The overall strategic environmental outcome is implemented during DTMR business through the Environmental Processes Manual (August 2013). The environmental assessment processes undertaken in accordance with the manual are then implemented during construction through Main Roads Specification MRTS51 Environmental Management which forms part of all our construction tender documentation. There are a variety of other environmental policies and documents which DTMR have developed to address some of the more specific environmental issues such as cultural heritage and noise, with all of these specialist policies providing support to the broader environmental assessment process undertaken by DTMR.	x	
7.4	**Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?**	x	

Provide name of proposal and EPBC reference number (if known)
The Department has previously referred a variety of actions from across Queensland including:

- EPBC 2008/4452 Bruce Highway, Cooroy to Curra, Section B
- EPBC 2011/6024 Bruce Highway, Cooroy to Curra, Section A
- EPBC 2013/6815 Bruce Highway Realignment – Cabbage Tree Creek and Carman Road
- EPBC 2012/6423 Upgrade of Smith Street Motorway and Interchange with Labrador-Carrara Road, Parkwood.

8 Information sources and attachments

(For the information provided above)

8.1 References

CSIRO Land and Water Flagship (Westcott, D.A, Heersink D. K, McKeown, A and Caley, P) (2015). Status and Trends of Australia's EPBC-listed Flying-foxes. A report to the Commonwealth Department of Environment

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Department of Transport and Main Roads, 2015 Internal GIS Dataset – soilsRcea

Department of Main Roads, 2002. *Road Drainage Design Manual.* Queensland Government, Brisbane.

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Hansen, C 2011. *Eton Range Upgrade Project – Options W1A-W2A and X1A-X2A.* Report prepared for Department of Transport and Main Roads. Ecological Survey & Management, Brendale

IECA, 2008. *Best Practice Erosion and Sediment Control.* International Erosion Control Association (Australia), Picton.

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Mitchell, P. (1990) The home ranges and social activity of koalas - a quantitative analysis. Pages 171-87 in A.K. Lee, K.A. Handasyde, and G.D. Sanson (Eds.) *Biology of the Koala*. Surrey Beatty and Sons, Sydney.

Phillips, B, 1990. Koalas: the little Australians we'd hate to lose. Australian Government Publishing Service, Canberra.

Phillips, S. and Callaghan, J. (2011). The *Spot Assessment Technique*: a tool for determining localised levels of habitat use by Koalas *Phascolarctos cinereus*. *Zoologist* 35(3). Pp. 774-780

Prevett, P. T., Pope, R., Callaghan, J., and Bailey, L. The Management and Research of No-urban Koala Populations p 94-97. Central Queensland University

Reef Catchments, 2013. *State of Region Report (SORR) Mackay, Whitsunday and Isaac.* Reef Catchments, Mackay

SMEC, 2015. Eton Range Realignment Project, Field Survey Report for Matters of National Environmental Significance

State of Queensland, 2015. *Wildlife Online Extract*: State of Queensland, Brisbane. Available at: https://environment.ehp.qld.gov.au/report-request/species-list/

White, N.A. (1999) Ecology of the koala (*Phascolarctos cinereus*) in rural south-east Queensland, Australia. *Wildlife Research* **26**: 731-44.

8.2 Reliability and date of information

Information presented in Section 3 of this form has been obtained from the sources noted in Section 7.1. Updated searches of the DoE Protected Matters Search Database, and Qld Gov Wildlife Online Database were undertaken in July 2015.

The information from desktop and reference sources were validated by site inspections conducted for the project. Flora and Fauna assessments of the proposed action area were conducted in 2009, 2011 and 2013 by Ecological Survey and Management (EcoSM) and 2015 by SMEC. Environmental studies were undertaken by reputable and experienced ecologists in accordance with recognised survey and reporting methods.

8.3 Attachments

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Attachment A – GIS file Attachment B – Longitude and Latitude Attachment E - Project Boundaries Attachment C – Location Map Attachment M – Earthwork Plans
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Attachment H – Figure 3

If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)	✓	Attachment K - Species Management Program (DEHP) – Colonial & Least Concern Species
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	Attachment F – Ecological Assessment Report Peak Downs Highway Realignment Eton Range Crossing, EcoSM 2009 Attachment G - Eton Range Upgrade Project – Options W1A-W2A and X1A-X2A EcoSM 2011 Attachment H - Eton Range Realignment Project Fauna Assessment Report 2013 Attachment I - Eton Range Realignment Project, Field Survey Report for Matters of National Environmental Significance Attachment L – Fauna Management Program – Koala, Eton Range Realignment
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	✓	Attachment H – Section 3.1.4, 4.5 and Attachment C Significance Assessment Attachment I – Sections 4 and 5.
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

9 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action[4].

Project title:

9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act[5], this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action[6].

1. Name and Title:	Pat Aprile – District Director (Mackay/Whitsunday)
2. Organisation:	Queensland Department of Transport and Main Roads
3. EPBC Referral Number:	
4: ACN / ABN :	39407690291.
5. Postal address	PO Box 62, Mackay QLD 4740
6. Telephone:	4951 8555
7. Email:	mackay.office@tmr.qld.gov.au
8. Name of designated proponent (if not the same person at item 1 above and if applicable):	

[4] *If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.*

[5] *If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A,* EPBC Act*). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.*

[6] *If a person other than the person proposing to take action is to be nominated as the proponent, please contact the Referrals Gateway(1800 803 772) to obtain an alternative contacts, signatures and declarations page.*

9. ACN/ABN of designated proponent (if not the same person named at item 1 above):

COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

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

□ an individual; OR

□ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR

□ not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth)).

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations. Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:

□ not applicable.

Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.
I agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature

Date 27/08/15

9.2 Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name	Shannon Ireland
Title	Environmental Officer
Organisation	Queensland Department of Transport and Main Roads
ACN / ABN (if applicable)	
Postal address	PO Box 62, Mackay QLD 4740

Telephone	4951 8555
Email	mackay.office@dtmr.qld.gov.au
Declaration	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.
Signature	Shanna Allreland Date 27/8/15