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Scale: 1:350,000
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0 2.5 5 10 Kilometers

Legend

Highways	Protected Areas	Location of Port Land which contains TMR Proposed Offset
RR4 Concept Design	Townsville Local Government Area	BTF Preferred RE's Within BTF Important Areas
Wildlife Corridors	Black-Throated Finch Important Areas	State Land Parcels

TOWNSVILLE RING ROAD SECTION 4

Overlap of Important BTF Habitat Mapping with the Protected Estate in Townsville Region

Figure 13

The current value of the BTF habitat on the balance of these lots has not been formally described, although NRA have recently completed a field survey to inform the BTF habitat management plan required by SEWPaC under the controlled action conditions for the port quarry (see Appendix F). Discussion with NRA (Buosi P pers.com) indicates that during this survey no BTF were observed at Yellow Dam. Habitat condition appeared to be degraded, through intensive cattle grazing and weed invasion with rat's tail grass particularly abundant. Currently habitat condition around Yellow Dam and the supporting habitat is not considered of sufficient quality to sustain a BTF population for any length of time (Buosi, P. pers. com. 28 June 2013). While NRA has not formally assessed the habitat quality for BTF in the port land for an offset calculation, it would appear that the current state of the habitat would score either 2-3 (out of 10) for habitat quality.

PoTL in their referral to SEWPaC stated that their intention to set aside the balance of both lots as a future offset site for future port development (page 14, EPBC 2010/5461). TMR and PoTL are negotiating TMR funding arrangements for the protection and management of the remaining BTF habitat in these lots as an offset for TRR4.

It is anticipated that the proposed offset area would, with suitable land management, contribute to the long-term persistence of the BTF in the region through conserving a site that could contribute to a broader regional connectivity. An indirect offset proposal would support the understanding how the improvement of habitat quality through land management practices is able to re-establish BTF populations. A more detailed discussion of the possible research topics for the indirect offset component of TMR's proposal is provided in section 6.4.1.

6.4.2 Parameters for the Offset Calculation

Ratings or inputs for each of the required parameters for the offset calculation (as defined in the EPBC Offset Guideline, 2012) on the impact site are drawn from NRA's study of BTF in the broader TRR4 area as follows:

Impact area size

Direct habitat loss based on vegetation clearance requirements for the construction footprint has been put in the calculator as 55 ha which is considered sufficient for the final design and construction methodology.

Habitat quality ranking

Habitat quality ranking for the impact site is set as 7 from NRA's fixed values in Table B, Appendix 2 of the NRA 2013).

The other offset parameters set for the offset calculation are as follows:

Time horizon (years)

- Time over which loss is averted – 20 years. It is believed that securing an offset in the PoTL land during 2013-2014 could combined with management effort avert the loss of BTF habitat in this area, as funding from TMR to PoTL could be applied to the management of the land before the PoTL's own operations commence and this score could be reduced.
- Time until ecological benefit – 3 years (from NRA, 2013b).

Start area of potential offset

- Start area of potential offset – balance of BTF habitat available from PoTL lots - 193 ha
- Start quality of potential offset – set at 3 *Future area and quality without offset*
- Risk of loss without offset (%) is set as 95% (given the consistent drop in population numbers since 2009 – see Figure 5)
- Future quality without offset (scale) 1 (discussed with P. Buosi).

Future area and quality with offset

- Risk of loss (%) with offset – 25%
- Future quality with offset (scale) – 5.

Confidence in result (%)

- Risk of loss with or without offset – 95%
- Future quality with or without offset – 95%.

Table 17 presents the anticipated offset size requirements based on direct impacted habitat as calculated by the offset calculator, when the above rankings are applied.

Table 17 Offset Requirement based on the Offset Calculator

Description of Impact Area	Impact Area (ha)	% of Impact Offset ⁵	Minimum Direct Offset Requirements Met? ⁶
BTF habitat directly impacted within the project area is 36 ha however 55 ha is used in the calculator.	55	140.49%	Yes

6.4.3 Indirect Offsetting

TMR propose to provide an indirect offset, through research projects identified with an accredited institution such as James Cook University, which extend scientific understanding on the likely mechanisms which generate fluctuations in BTF population numbers, and which build on BTF recovery plan objectives and associated achievements to date. A number of potentially beneficial studies have been identified which would likely support better decision making by proponents in future. Examples of these are:

- 1) to what extent habitat quality and water availability may affect the abundance of BTF locally.
- 2) how road traffic noise effects BTF breeding and foraging behaviour.
- 3) how effective particular land management practices can be in improving habitat condition for BTF particularly fire management, weed control and replanting.

The final research topics chosen will be informed by consultation with the Recovery Team. Outcomes of research understanding gained by TMR where relevant will be used to improve habitat condition and utilisation of the TRR4 offset site by BTF. TMR will facilitate informal relationships between the researchers to ensure that new findings can be incorporated or trialed at the TRR4 offset site.

6.4.4 Management Strategy for the TRR4 Offset

POTL are already required by SEWPac to prepare the following plans as part of their controlled action obligations for the quarry operation (refer to Appendix F for the Port's conditions under the Port Pinnacles Quarry's EPBC decision).

- Site Based Management Plan
- EMP (Construction)
- Quarry Design and Planning Report
- Revegetation and Remediation Plan, and
- Sediment Erosion and Sediment Control Plan

All of the above documents are required to address vegetation clearance, frequency of blasting activities, management of fugitive dust, sediment and erosion control, water management, site vegetation and remediation, and weed management amongst other matters.

Relevant to the TRR4 offset is that POTL are also required to prepare a BTF management plan for their land associated with the Pinnacles Quarry which includes requirements for annual monitoring and specific management requirements (grazing, fire, weed management) to ensure the ongoing viability of BTF habitat in POTL land (i.e. for both lots- refer to Clause 12 and the definition of site in the port approval conditions – Appendix F). POTL are only required to formally protect the land associated with Central Creek – refer to clause 20 in Appendix F).

This BTF management plan is expected to be complete by late December 2013. The proposed agreement with POTL for the TRR4 offset would extend the active management obligations under the BTF management plan into the proposed TRR4 offset area, specifically with the view to increasing the habitat quality for BTF around Yellow Dam in the short term.

⁵ Percentage as calculated by offset calculator.

⁶ The EPBC offset calculator, determines whether the minimum (90%) direct offset requirement has been met.

The primary management requirements for the TRR4 offset will need to be consistent with this overall BTF management plan. However the primary management intents for improving the habitat quality for the TRR4 offset are:

- Fencing (with gates) to be able to restrict cattle grazing which is occurring elsewhere in the port land, and in time to allow for controlled low levels of grazing in combination with other habitat improvement measures to control weeds as is necessary for BTF habitat quality improvement especially around Yellow Dam
- Fire management to support control of weeds and encourage BTF grass growth particularly for the dry season
- Weed control, particularly for *Sporobolus* sp. (Rat's tail grass). Likely to require repeated herbicide use over a number of years
- Water source management. Yellow Dam receives pump water for cattle and provides a reliable supply of water during the dry season under the current management regime. This supply would need to continue with the restriction of access for cattle, to provide a permanent BTF water source. There may also be other areas within the TRR4 offset area that may also benefit from water provision as the habitat quality improves. Consideration of providing alternate water sources for BTF is suggested as part of the overall management strategy.
- Monitoring for feral animals, particular pigs
- Monitoring weed control effectiveness and return of native BTF grasses into the habitat area
- Ongoing BTF water hole counts in conjunction with the Recovery Group and also breeding season monitoring as habitat condition improves
- Baseline (photo point and transect based) monitoring on grass species, and in future
- Possible replanting of BTF palatable grass should they not return into the habitat.

6.5 Social and Economic Matters

Provide a brief discussion on the social and economic benefits and adverse impacts of the proposal. The social and economic impact section of your response should briefly cover the broad benefits and adverse impacts to the community associated with the proposed action. This provides contextual understanding of the social and economic implications of the project outside of the matters of National Environmental Significance that are being assessed.

Response:

6.5.1 Social and Economic Benefits of TRR4

The TRR4 project is proposed new infrastructure on the northern outskirts of Townsville. It will become part of the Bruce Highway (Brisbane – Cairns Corridor). TRR4 will complete the overall 20km Townsville Ring Road link, which has been developed in stages since 2005 and is part of the National Network route through Townsville.

TRR4 will take over the National Network function, bypassing the:

- The interim National Network route: Shaw Road
- The existing National Network route: Bruce Highway (Shaw Road – Mt Low Parkway).

The project is needed because of:

- The operational deficiencies of the existing and interim National Network routes on Townsville's northern approaches, such as poor flood immunity, declining safety and travel-time reliability and associated impacts on freight efficiency and amenity. Further detail is provided below.
- Increasing National Network pressures on Townsville's northern approaches, particularly on the interim National Network (Shaw Road), due to inter-regional and intra-regional traffic growth and local traffic growth driven by Townsville's strong economic and associated population growth since 2000. This high growth is expected to continue to 2031.

Commonwealth and State Government deliberations in 2010 concluded that delivering TRR4 in the short term would provide greater network and value-for-money benefits than continuing to invest in the existing and interim National Network routes⁷.

The local community would benefit through the flood proofing of the road, the increasing residential area north of the city (e.g. Mount Low, Bushland Beach, Jensen and Deeragun) as the present situation means the main thoroughfare into Townsville is often reduced in the wet season. At present there are 4 lanes on the Bruce Highway between the Deeragun suburb and the intersection with Shaw Road. In the wet season this section can be reduced down to one or two lanes for both in- and out-bound traffic or cut altogether, impacting on various local, regional and State communities. This reduces the function of a National system and has flow on far-reaching economic and safety effects. In addition, modelling for Townsville City Council (AECOM, 2011) notes that Shaw Road is likely to require closing during a Q10 event. The traffic congestion and safety issues (mainly traffic incidents (including people attempting to navigate the floodwaters)) will be reduced with the provision of an alternative Q50 flood proofed route. TRR4 will marry up with the completed sections of Townsville Ring Road allowing a section of (minimum Q50) flood immune road through to the southern regional and sub-regional centres of the city (Aitkenvale, Thuringowa Central and the CBD), James Cook University (Douglas), Lavarack Barracks (Australian Defence Force) (Annandale (adjacent to Douglas)) and the hospital (Douglas) (a large proportion of Townsville's workforce is employed at one of the last three places mentioned).

Townsville Economy

Townsville has experienced strong economic and associated population growth since 2000. *A Demographic Analysis of Townsville* (KPMG, 2011) concluded that Townsville's strong population growth was driven by economic growth and that the high-growth scenario would continue until at least 2026 (KPMG, 2011)⁸. The city's high growth rate has coincided with the mining boom and the growth of the Lavarack Barracks, one of the Australian Defence Force's largest army bases. The KPMG analysis noted that continuing strong population growth was expected to be driven by continued growth in mining and defence jobs⁹. The *Townsville Area Study*

⁷ *Townsville City Urban Congestion Study* (June 2010)

⁸ *Demographic Analysis of Townsville*, January 2011, KPMG

⁹ KPMG report

(TAS), prepared by TMR in liaison with key stakeholders, notes that high growth is expected to continue until 2031 (TMR, 2011)¹⁰. Townsville has a robust and diverse economy, which is also based on:

- Its increasing importance as a health, education, administrative, business and recreation service centre for North Queensland;
- The expansion of the Port of Townsville, an import and export port for the key industries to the north, south and west of the city (agriculture and mining); and
- Its light-industry sector.

Townsville is one of the fastest growing areas in Queensland, with its population growth rate exceeding state and national averages in recent years. Using medium to high-growth forecasts, Townsville's population of 180,000 (June 2011) is forecast to increase to:

- 216,000 - 223,000 (by 2016).
- 246,000 to 290,000 (by 2026).
- 265,000 – 325,000 people (by 2031)¹¹.

The growing economy and associated population growth are placing increasing pressure on the existing and interim National Network on Townsville's northern outskirts, together with inter-regional and intra-regional highway-traffic growth on the Bruce Highway (Brisbane – Cairns) corridor. This is exacerbating the existing deficiencies of the existing and interim National Network.

6.5.2 Potentially Adverse Impacts

The main contributor to social impacts is expected to be from noise as the TRR4 project is located close to several sensitive receptors:

- Bohle Plains: Dwellings at the Kalynda Chase Estate, near the southern connection with Shaw Road; and
- Deeragun: Close to dwellings (including the Council approved Brendale Residential Estate), a caravan park, a school (St Anthony's Catholic School) and passive recreation area (Michael Hooper Park).

Accordingly, future road traffic noise impact from TRR4 to these receptors should be controlled to meet the requirements of the TMR document Road Traffic Noise Management: Code of Practice 2008. Consideration should also be given to controlling the combined noise impact from TRR4 and from other nearby state-controlled roads, such as the Bruce Highway, Shaw Road and Ring Road Section 2, and associated on- and off-ramps. This will allow for holistic noise treatments to be designed.

A business case noise assessment was carried out in 2012 to assess traffic noise impact to receptors in Deeragun. It was found that:

- Noise barriers up to 3.6m high are forecast to be required between TRR4 and the receptors. This is currently being modelled to confirm requirements.
- In conjunction with the noise barriers, Dense Graded Asphalt is to be used in lieu of a bituminous seal road pavement for sections of the road close to these receptors.
- At-building treatments may be required (comprising the provision of mechanical ventilation and/or air-conditioning) for few receptors where noise barriers and a DGA road pavement alone are not forecast to be sufficient at controlling the traffic noise impact to meet the external noise criterion.

Noise assessment components continuing during 2013 includes:

- Conducting pre-construction noise measurements at Bohle Plains (measurements at Deeragun were successfully completed in 2012).
- Refining the noise model with updated TRR4 road alignments, any changed traffic projections, as well as recent survey of the topography and buildings on site. Extend the 2012 assessment to include the receptors at Bohle Plains.

¹⁰ Townsville Area Study, Department of Transport and Main Roads, May 2011

¹¹ Queensland Regional Profiles – Townsville City Local Government Area, October 2012, Office of Economic and Statistical Research, Queensland Treasury and Trade

- Assessing the cumulative impacts from other nearby state-controlled roads (such as the Bruce Highway, Shaw Road, Ring Road Section 2, and on- and off-ramps associated with TRR4 roads). This will allow for holistic noise treatments to be designed.
- Determining suitable locations for the noise barriers. Where possible, the noise barriers are to be located close to the road, or close to the receptors.
- Obtaining a floor plan of the ground and upper floors of receptors likely to require at-building treatments. This will allow the assessment of at-building treatments to be refined if required.

Construction phase noise and vibration impacts to nearby receptors (school, dwellings and caravan park), areas of ecological importance, and critical structures (e.g. pump stations, underground utilities, power stations, etc.) are to be monitored and assessed in accordance with the Department of TMR document MRTS Main Roads Technical Standard MRTS51 Environmental Management dated April 2011 for the assessment. This may involve an upfront assessment of forecast noise and vibration impacts such that protective/preventative measures are incorporated prior to works beginning.

6.5.3 Consequences of Not Proceeding

The objective of TRR4 is to address the operational deficiencies of the existing and interim National Network routes by providing:

- a freight bypass (for through and intra-regional freight, as the northern access to the Port of Townsville)
- a reliable route for through and intra-regional passenger traffic, with improved flood immunity
- a route which meets contemporary safety standards.

If the TRR4 project does not proceed, the operational deficiencies of the existing and interim National Network infrastructure will continue to have a negative effect on business, tourism and the local community. These deficiencies include:

- Safety – The existing National Network - Bruce Highway (Shaw Road – Mt Low Parkway) - has a poor safety record, with a recent six-year crash record of a total of 55 crashes. Some 42% of these involved serious casualties (one fatality, 22 hospitalisations)¹². While, the federally-funded upgrade of the Woodlands to Veales Road section of the highway in mid-2009 has improved safety on this link, forecast further increases in traffic volumes will see conflict increase between inter-regional, intra-regional and local traffic. The interim National Network (Shaw Road) has a poor horizontal alignment and numerous uncontrolled accesses along its length, mixing increasing volumes of through and turning traffic
- Flood immunity – poor flood immunity at Shaw Road (< Q10 immunity) is affecting the reliability of the National Network. Alternative routes for traffic diversion on the adjacent major arterials (Other State-Controlled Roads and local roads) have Q1 flood immunity (at Woolcock Street low-level, northbound bridge and at Blakey's Crossing on Ingham Road)
- Reliability and connectivity – Travel-time reliability on the existing National Network is declining – particularly on the Bruce Highway (Shaw Road – Garland Road) section - as the existing network is unable to absorb the impact of traffic incidents. The existing Bruce Highway can experience unexpected delays of 30 – 60 minutes when minor traffic incidents occur. Disruptions from flooding and traffic incidents result in poor connectivity at this section of the Brisbane – Cairns corridor
- Freight efficiency and productivity – The above deficiencies in travel-time reliability and connectivity are impacting on freight efficiency for through and intra-regional freight. Deficiencies in flood immunity on Woolcock Street and Ingham Road affect Port-related freight to and from the north, which currently uses Woolcock/Boundary Streets as the northern Port access route. This route also has amenity issues associated with it. It traverses retail and residential precincts.

¹² North Queensland Mayors' Submission: Bruce Highway (Sarina to Cairns) Urgent National Network Needs, June 2010

A further consequence of the project not proceeding is that the Commonwealth Government election commitment would not be delivered. The Prime Minister's media release announcing the funding commitment stated that the project would:

- deliver the long-term infrastructure needed for economic growth in Townsville
- provide a more direct route for freight
- relieve congestion on local roads by diverting freight to the Ring Road link
- provide a long-term flood immunity solution on the northern approaches to Townsville.

6.6 Ecologically Sustainable Development Principles

Provide a brief discussion of how the proposal will conform to the five principles of Ecologically Sustainable Development. To assist you, the National Strategy for Ecologically Sustainable Development (1992) is available on the following web site: <http://www.environment.gov.au/about/esd/index.html>

Response:

Section 3A of the EPBC Act states that:

The following principles are principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equity considerations;*
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;*
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;*
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;*
- (e) improved valuation, pricing and incentive mechanisms should be promoted.*

Table 18 discusses TRR4 in relation to each of the EPBC Act Section 3A principles.

Table 18 Principles of Ecologically Sustainable Development

ESD Principle	Proposed Action
Decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations	<ul style="list-style-type: none"> - Delivering TRR4 in the short term would provide greater network and value-for-money benefits than continuing to invest in the existing and interim National Network routes. - Long term economic and social benefits include the improved flood immunity, safety and travel-time reliability and associated impacts on freight efficiency and amenity. - Short and long term environmental impacts will be managed through a variety of mitigation measures as noted in this report, these include but are not limited to: management plans (e.g. environmental and species-specific), design considerations and maintenance programs. Long term benefits to the environment will include management mechanisms such as weed and fire management, in addition to offsets of land. - Design of TRR4 was engineered to ensure as small as impact as possible on the environment. - Goods and services will be sought and supplied from appropriately licenced, permitted and/or approved places and operators. - Bypass of the heavily urbanised area can reduce the use of fossil fuels and output of emissions from vehicles through improved traffic flow. Also allows the local urban area to function more efficiently without the interruption of 'thoroughfare traffic'. - Improved safety through the reduction of heavy versus light vehicles interactions.

ESD Principle	Proposed Action
<p>If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation</p>	<ul style="list-style-type: none"> - Cumulative impact assessment on the removal of Black-throated Finch habitat and land degradation in the Townsville area has not been undertaken, however general information on habitat is available in the national Recovery Plan, as well as other information sourced from publically available documents (e.g. ecological assessments for development) and project-specific investigations. With this information in mind, required mitigation measures have been proposed in this document. - The recovery plan for the Bare-rumped Sheathtail Bat notes that in general little is known about the habitat preferences and biology of, and threats to, this bat. Habitat destruction is a known threat. Echolocation of the bat has occurred as part of the planning for this project in order to confirm the status and enable mitigation measures to be proposed - The project's impacts will be managed through an overarching EMP with supporting documentation such as (but not limited to) a vegetation management plan (imposes exclusion zones and minimum clearance requirements), weed management plan and a fire management plan (assists with weed management and promoting growth of vegetation, such as grasses for the Black-throated Finch). While the aforementioned EMP has a project lifetime limitation, once the road is operational TMR will manage the land in line with their environmental management policies. - The continuation of land and environmental management for the lifetime of the proposed asset (i.e. TRR4) will assist in reducing the threats and impacts during the operational phase on the local environment.
<p>The principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations</p>	<ul style="list-style-type: none"> - The potential impacts on endemic and threatened Australian species have been identified and further investigations undertaken (e.g. on the Black-throated Finch and Bare-rumped Sheathtail Bat, and the locally significant Northern Spadefoot Toad) and mitigation measures have been provided to minimise any threats. - Long term health, diversity and productivity will be maintained, for example, through the provision of offsets (where significant residual impacts remain), design elements that assist in providing further habitat (e.g. water sources) and utilising plants that provide ongoing food and seed stock for protected species. Other mitigation measures have been provided.

ESD Principle	Proposed Action
<p>The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making</p>	<ul style="list-style-type: none"> - The long and short term planning for TRR4 has sought to avoid impacts to fauna, flora and their habitat as much as possible. The concept and detailed design has been undertaken with potential environmental impacts in mind. Where applicable, consultation with relevant State Government departments has occurred to assist in making design decisions (e.g. the Department of Agriculture, Fisheries and Forestry with regards to fish habitat and passage requirements). - The design engineers and environmental specialists have collaborated throughout the life of project to ensure that the project is delivered with consideration to the functioning requirements of the ecosystems present.
<p>Improved valuation, pricing and incentive mechanisms should be promoted</p>	<ul style="list-style-type: none"> - TMR's road network strategic planning approach includes high level long-term policy. The policy relates to the Commonwealth Government's Ecologically Sustainable Development principles by ensuring "...that our roads contribute to the social, economic and environment well-being of Queenslanders..." that contains considerations for funding, environmental management and community safety and liveability. Project planning at this level considers opportunities and impacts, including intangible and monetary costs, prior to commencement of the short-term project level planning. - At a project level there is a requirement by this State Government department to consider alternative options and capture potential issues and opportunities. The stages (Concept, Design and Construction) that the project goes through can take many years to complete. It is a rigorous process involving (at applicable times) stakeholders (industry, community, government, service providers, lobbyists, etc.) where land management, environmental impacts, effects on the community, and business and monetary implications are assessed. - Project-specific investment in the environment is occurring through the provision of environmental offsets. Investigations have occurred into the viability of several options, to ensure that the land banked for environmental protection is suitable for rehabilitation/enhancement for Black-throated Finch habitat more generally in Townsville. - Other investment in the environment has occurred with the number of surveys and site investigations undertaken to date, and the management planning presently underway to maintain the habitat in the area post-construction.

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Appendix A

Request for Information



EPBC Ref: 2012/6562

Mr David Atkinson
Regional Director (Northern Region)
Department of Transport and Main Roads
PO Box 1089
TOWNSVILLE QLD 4810

Dear Mr Atkinson

**Request for additional information
Townsville Ring Road Section 4, Townsville, Queensland (EPBC 2012/6562)**

On 25 October 2012, the delegate for the Minister decided that the proposed construction of a new, two lane road, known as the Townsville Ring Road Section 4 (TRR4) between Shaw Road and the Bruce Highway, Bohle Plains, Townsville required assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). On the same day the delegate for the Minister decided that the proposed action would be assessed by preliminary documentation.

Assessment by preliminary documentation means that we will be assessing your project using:

- the information contained in your original referral;
- further information you are required to provide on the impacts of the action and the strategies proposed to mitigate and/or offset that impact; and
- any other relevant information on matters protected by the EPBC Act.

To assess the relevant impacts of the proposed action we request that you provide the additional information outlined in Attachment A. Once we have received the requested information you will be provided with instructions on the public consultation requirements to progress assessment of the project. Details on the assessment process and the responsibilities of the proponent are set out on the department's website at www.environment.gov.au/epbc.

In any correspondence with the department please quote the title of the action and EPBC reference as shown at the beginning of this letter. You can send information to us:

by letter Queensland Section
 Queensland and South Australia Assessment Branch
 Department of Sustainability, Environment, Water, Population &
 Communities
 GPO Box 787
 CANBERRA ACT 2601

by email Heidi.Crook@environment.gov.au

If you have any questions the process please contact the EPBC project manager, Heidi Crook, by email to heidi.crook@environment.gov.au, or telephone 02 6274 2142 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely



David Calvert
A/g Assistant Secretary
Queensland and South Australia Assessment Branch
Environment Assessment and Compliance Division
8 November 2012

ATTACHMENTS

A: Request for additional information.

ATTACHMENT A

Request for Additional Information – Assessment by preliminary documentation Townsville Ring Road Section 4, Townsville, Queensland (EPBC 2012/6562)

It has been determined that the proposed action is likely to have a significant impact on the following controlling provisions which are protected under Part 3 of the EPBC Act:

- Listed threatened species and communities (sections 18 & 18A)

It has also been determined that the proposed action will be assessed by preliminary documentation. The information about the action and its relevant impacts, as outlined in the referral and in the additional information described below, will make up the required information.

GENERAL CONTENT, FORMAT AND STYLE

The preliminary documentation, which includes the referral information and the additional information described below, should be contained as one document with attachments, and include sufficient information to avoid the need to search for supplementary reports.

The documentation must enable interested stakeholders and the Minister to understand the environmental consequences of the proposed development on matters of national environmental significance. The information provided should be objective, clear and succinct and where appropriate, supported by maps, plans, diagrams or other descriptive detail.

Detailed technical information, studies or investigations necessary to support the main text should be included. It is recommended that any supporting documentation and studies, reports or literature, from which information has been extracted and which are not normally available to the public, be attached as appendices to the main document and made available at appropriate locations during the period of public display of the preliminary documentation. The proponent should also make the documentation and supporting information available on the internet.

If it is necessary to make use of material that is considered to be of a confidential nature, the proponent should consult with the Department of Sustainability, Environment, Water, Population and Communities (the department) on the preferred presentation of that material, before submitting the documents to the Minister for approval for publication.

The level of analysis and detail in the documentation should reflect the level of expected impacts on the environment. Any variables or assumptions made in the assessment must be clearly stated and discussed. The extent to which the limitations,

if any, of available information may influence the conclusions of the environmental assessment should be discussed.

The documentation should be written so that any conclusions reached can be independently assessed. To this end, all sources must be appropriately referenced using the Harvard standard. The reference list should include the addresses of any internet "web" pages used as data sources, including the date of access.

The additional information should include a list of persons and agencies consulted and the names of, and work done by, the persons involved in preparing the documentation.

Maps, diagrams and other illustrative material should be included where appropriate. The additional information should be produced on A4 size paper capable of being photocopied with maps and diagrams on A4 or A3 size and in colour where possible. The proponent should consider the format and style of the document appropriate for publication on the internet. The capacity of the website to store data and display the material may have some bearing on how the document is constructed.

The additional information must include a copy of these guidelines and a table indicating where the information fulfilling the guidelines is included in the preliminary documentation.

CONTENT OF THE ADDITIONAL INFORMATION

1. Matters of National Environmental Significance

Provide detailed information on the likely presence, distribution, ecology and habitat of listed threatened species, communities or other matters of National Environmental Significance (MNES) likely to and/or potentially occurring at the project site and adjacent areas. Information should be obtained from previous records, fauna databases, scientific literature and other reports. Provide a discussion on all potential direct and indirect impacts of the proposal on the listed threatened species or communities. Types of indirect impacts may include, but are not limited to: changes to water quality, introduction of pathogens and edge effects either during or post construction.

2. Black-throated Finch (Southern) - *Peophila Cinta Cinta*

Conduct targeted field surveys of the subject site and surrounding areas to determine the presence, numbers and location of the Black-throated Finch (Southern). The surveys must include both dry and wet season surveys for the species and the survey methodology must be developed in accordance with the "Survey Guidelines" within the *Background paper to the EPBC Act policy statement 3.13*, available at <http://www.environment.gov.au/epbc/publications/black-throated-finch.html>.

3. Bare-rumped Sheath-tail Bat - *Saccolaimus saccolaimus nudicluniatu*

Conduct further surveys to quantify the impact of the proposed action on the Bare-rumped Sheath-tail Bat. It is suggested that targeted tree roost surveys and

observations be carried out on trees that are likely to provide roosting habitat for the species. These surveys must be conducted in accordance with the *Survey guidelines for Australia's threatened bats*, available at:

<http://www.environment.gov.au/epbc/publications/pubs/survey-guidelines-bats.pdf>

4. Environmental Management Plan

Provide a detailed Environmental Management Plan (EMP) for all MNES impacted by the proposed action. The EMP must incorporate the results of all surveys and information collected and should identify the important habitat on site. The EMP should fully discuss all potential impacts of the proposed action on MNES and outline in detail all proposed avoidance and mitigation measures.

5. Offsets

Identify suitable offsets to compensate for any residual significant impacts to MNES after all avoidance and mitigation measures have been implemented. Any proposed offsets must be consistent with the department's offset policy statement at:

<http://www.environment.gov.au/epbc/publications/environmental-offsets-policy.html>

6. Social and Economic Matters

Provide a brief discussion on the social and economic benefits and adverse impacts of the proposal. The social and economic impact section of your response should briefly cover the broad benefits and adverse impacts to the community associated with the proposed action. This provides contextual understanding of the social and economic implications of the project outside of the matters of National Environmental Significance that are being assessed.

7. Ecologically Sustainable Development principles

Provide a brief discussion of how the proposal will conform to the five principles of Ecologically Sustainable Development. To assist you, the National Strategy for Ecologically Sustainable Development (1992) is available on the following web site:

<http://www.environment.gov.au/esd/national/nsesd/strategy/index.html>

Appendix B

Black-Throated Finch Survey Report



Environmental Approval & Compliance Solutions

Townsville Ring Road Section 4 Project

Black-throated Finch (*Poephila cincta cincta*) Supplementary Assessment December 2012 and April 2013


AECOM Australia Pty Ltd

Document Control Summary

NRA Environmental Consultants

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Report Summary	
Key Words	Black-throated Finch, <i>Poephila cincta cincta</i> , Townsville Ring Road Section 4 (TRR4), EPBC, BTF.
Abstract	The presence of the Endangered Black-throated Finch (BTF) and its habitat near the Townsville Ring Road Section 4 (TRR4) Project was determined through field surveys in December 2012 and April 2013. The potential impacts of the TRR4 Project on this species are assessed and the potential implications with respect to environmental offsets (EPBC Act) are discussed.

Quality Assurance					
Author	Technical Review	Editor	Document Version	Approved for Issue by QA Manager	
				Date	Signature
Peter Buosi BAppSci (Hons)	Tim Anderson MAgrSc, BAgSc (Hons)	Kate Steyn BAgrSc	R02	19/08/2013	

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Limitations of this Report

The information in this report is for the exclusive use of AECOM Australia Pty Ltd on behalf of the Queensland Department of Main Roads and Transport, the only intended beneficiaries of our work. NRA cannot be held liable for third party reliance on this document. This disclaimer brings the limitations of the investigations to the attention of the reader. The information herein could be different if the information upon which it is based is determined to be inaccurate or incomplete. The results of work carried out by others may have been used in the preparation of this report. These results have been used in good faith, and we are not responsible for their accuracy. The information herein is a professionally accurate account of the site conditions at the time of investigations; it is prepared in the context of inherent limitations associated with any investigation of this type. It has been formulated in the context of published guidelines, field observations, discussions with site personnel, and results of laboratory analyses. NRA's opinions in this document are subject to modification if additional information is obtained through further investigation, observations or analysis. They relate solely and exclusively to environmental management matters, and are based on the technical and practical experience of environmental practitioners. They are not presented as legal advice, nor do they represent decisions from the regulatory agencies charged with the administration of the relevant Acts. Any advice, opinions or recommendations contained in this document should be read and relied upon only in the context of the document as a whole and are considered current as of the date of this document.

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1. Introduction

The Queensland Department of Transport and Main Roads (QTMR) propose the construction of a road between Shaw Road and the Bruce Highway, Townsville (**Figure 1**). The project is known as the Townsville Ring Road Section 4 Project (TRR4 Project) and was submitted to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) for assessment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 27 September 2012¹. On 25 October 2012, the project was deemed a controlled action due to potential impacts on threatened species as listed under the EPBC Act. In a letter dated 8 November 2012, DSEWPaC asked QTMR to provide additional information on a number of matters to assist with the assessment process.

Sections of the DSEWPaC's Information Request relate to the Endangered (EPBC Act) southern subspecies of Black-throated Finch (*Poephila cincta cincta*, hereafter BTF)². AECOM, who is assisting QTMR with their response to the Information Request, engaged NRA Environmental Consultants (NRA) to undertake field studies and reporting regarding this species.

1.1 Scope

The scope of works for this project is described below.

- Undertake a targeted survey for BTFs along and near the proposed TRR4 Project route in the dry season of 2012 and the late wet season of 2013 to:
 - ascertain the presence, numbers and distribution of BTFs, and
 - assess the condition of habitats being used by BTFs.
- Assess the potential impacts of the TRR4 project on BTFs using existing information (NRA 2012) and information collected during the 2012/2013 field surveys.
- Provide advice on attributes of the 'impact calculator' component of DSEWPaC's Offsets Assessment Guide with respect to potential direct impacts associated with the TRR4 Project on BTFs.
- Record the locations of other State or Commonwealth listed Threatened and/or Migratory fauna and flora encountered during BTF field surveys. The information will be provided as raw data (species, abundance and location) without analysis or interpretation.

This study focuses on areas of potential BTF habitat along and near to the proposed TRR4 Project alignment as determined during the previous NRA 2012 study and contained within Lot 1 SP232873 (**Figure 1**).

¹ Referral Reference Number 2012/6562.

² The Black-throated Finch (*Poephila cincta cincta*) is also listed as Endangered under the Queensland *Nature Conservation Act 1992*.