

Lansdown Eco-Industrial Precinct (LEIP) Old Flinders Highway Intersection Upgrade

Application Number: 02950

Commencement Date:
02/06/2025

Status: Locked

1. About the project

1.1 Project details

1.1.1 Project title *

Lansdown Eco-Industrial Precinct (LEIP) Old Flinders Highway Intersection Upgrade

1.1.2 Project industry type *

Transport - Land

1.1.3 Project industry sub-type

Road

1.1.4 Estimated start date *

07/07/2025

1.1.4 Estimated end date *

31/03/2027

1.2 Proposed Action details

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

A detailed project description and discussion on previous surveys conducted throughout the Proposed Action area is found in the CDM Smith MNES Report (Attachment A) and is summarised below.

Townsville City Council (TCC) is delivering the LEIP Project, Northern Australia's first environmentally sustainable, advanced manufacturing, technology, and processing hub, located approximately 38 km south of Townsville, adjacent and west of Flinders Highway. The LEIP will realise the objectives of the Townsville City Deal (a tri-partisan agreement spanning 15 years and all levels of government) to activate industry and export growth for Townsville and its regional partners as the Industry Powerhouse of the North. The LEIP is located on approximately 2,200 hectares (ha) of freehold land owned by TCC.

In recognition of the LEIP's economic and social significance, on 7 March 2023 the LEIP was declared a 'Prescribed Project' under section 76E of the *State Development and Public Works Organisation Act 1971* by the Queensland State Government.

To support the development of the LEIP, several early enabling works, cumulatively called the Enabling Infrastructure Project, are proposed, including road access at the northern and southern section of the site and a raw water network. On 22 December 2022, the Enabling Infrastructure Project was determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and was approved with conditions in December 2023 (EPBC 2022/09383).

The Flinders Highway and Old Flinders Highway intersection to the Jones Road and Woodstock Avenue intersection upgrade (the Proposed Action) is being undertaken as part of Enabling Infrastructure Project. This intersection upgrade was partially referred as part of the larger Enabling Infrastructure Project referral (2022/09383), however, the intersection design was in the very early stages of development and therefore requires further assessment due to the development footprint increasing since it was originally referred and approved. The intersection design is near complete, having reached the detailed design milestone. Due to the complexity of the LEIP Project impacting state infrastructure and requiring design input from state agencies, this Proposed Action has evolved on its own and is being treated as an independent package and referral for consideration by the Minister for the Environment.

The Proposed Action is located west of the Flinders Highway, along Glenn Road to the Old Flinders Highway intersection and then towards the Jones Road and Woodstock Avenue intersection, as displayed in Figure 1-3 of the LEIP MNES Report (Attachment A). The Proposed Action involves the following works:

- A new intersection of Old Flinders Highway, Woodstock Avenue and Jones Road.
- Waterway diversion of Fields Creek. The updated design of the intersection overlays approximately 200 m of Fields Creek. The design proposes to realign the creek to replicate the existing length of creek to be removed. The State Assessment and Referral Agency (SARA) has Approved, with conditions, a Development Permit for Operational Work-Waterway Barrier Works (Waterway Diversion) (SARA reference 2407-41542 SDA) on 6th December 2024.
- Queensland Rail Open Level Crossing. To support the upgrade, the Project also includes an open level crossing of the Mount Isa Rail Line that crosses the Old Flinders Highway, replacing a section of the existing rail and raising its vertical geometry, along with the associated redesign of the road approaches.

The following areas are relevant to this referral:

- **Study Area.** The area utilised for the AECOM ecological assessment. This area includes the proposed Disturbance Area, along with a 100 m buffer area to consider all potential values surrounding the Proposed Action. This area encompasses 36.7 ha.
- **Disturbance Area.** Encompasses the maximum clearing area for construction and operation of the Proposed Action, including clearing and grubbing areas, access roads and site laydown areas. This encompasses 9.4 ha.
- **Avoidance Area.** The wider Study Area covering 36.7 ha, along with a Disturbance area of 9.4 ha results in an avoidance area of 27.3 ha.

- **Design.** The updated engineering design of the intersection developed by AECOM.

The Proposed Action will enable road access to the LEIP, and upgrade existing road and rail infrastructure to account for the increase in expected traffic and to suit Type 2 Road Train heavy vehicles. The Proposed Action will ensure practices are environmentally sustainable and protective while delivering road upgrades that safe.

The location of the Study Area and Disturbance Area, in addition to the updated engineering design are outlined on Figure 1-3 of Attachment A.

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

Yes

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

No

1.2.4 Related referral(s)

EPBC Number	Project Title
2023/09604	EGH2 Green Hydrogen Project
2022/09383	Lansdown Eco-Industrial Precinct – Enabling Infrastructure
2022/09281	Lansdown Eco-Industrial Precinct Access Road
2024/10024	Lansdown Eco-Industrial Precinct Northern Access Road
2021/9033	Queensland Pacific Metals - Townsville Energy Chemicals Hub TECH Project

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

Under Townsville City Council's infrastructure masterplan, the LEIP will be developed over the next 15-20 years in the following stages:

- **Stage 0** Enabling Infrastructure (2022–2028) – essential early enabling infrastructure works (Figure 1-2 within Attachment A MNES Report) to service the LEIP that primarily involves road access at the northern and southern section of the LEIP and a raw water network (including external pipeline, storage reservoir, internal pump station and internal pipeline) to service the initial proponents
- **Stage 1** (2022–2028) – Initial proponents obtain all various approvals and commence construction of their facilities
- **Stage 2** (2028–2032) – Initial proponents move into full and expanded operations. Expansion to the south, with provision of necessary infrastructure to service other proponents, and
- **Stages 3 & 4** (2033–2041) – Final expansion and infill of infrastructure to service those areas remaining. Proponents' operations continue to grow. Enhancement of infrastructure as the LEIP continues to be further developed.

The current Proposed Action, being the Flinders Highway Intersection upgrade, was initially referred under the Stage 0 Enabling Infrastructure Project. The Enabling Infrastructure Project was determined to be a controlled action under the EPBC Act and was approved with conditions in December 2023 (EPBC 2022/09383). Due to design changes and expansion to the disturbance area at the intersection, an additional referral for the Proposed Action is required to address these changes and confirm that it will have no significant impact on environmental values.

Additional referrals are expected for future aspects of the Enabling Infrastructure Project, including for a relocated reservoir area and power easements, as well as for individual proponents undertaking developments within the LEIP. This action being referred is a standalone action and not co-dependent on other actions by Council or proponents. There are likely to be separate actions and associated referrals undertaken in future by other proponents as a part of the establishment of the LEIP.

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

Commonwealth Legislation

Environmental Protection and Biodiversity Conservation Act 1999

The EPBC Act is the Australian Government's central piece of environmental legislation that provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the EPBC Act as matters of national environmental significance (MNES).

Protected matters under the EPBC Act are:

- World heritage properties
- National heritage places
- Wetlands of international importance (Ramsar wetlands)
- Nationally threatened species and ecological communities
- Migratory species protected under international agreements
- Commonwealth marine areas
- Great Barrier Reef Marine Park
- Nuclear actions, and
- A water resource in relation to coal seam gas and large coal mining development.

Desktop and field assessments completed for the LEIP Project to date have included assessments of the presence of MNES, including, Threatened Ecological Communities (TECs) and listed flora and fauna. An assessment of MNES throughout the Proposed Action is provided within the CDM Smith MNES Report (Attachment A).

Matters of National Environmental Significance: Significant Impact Guidelines 1.1 – EPBC Act

The Significant Impact Guidelines 1.1 are provided under the EPBC Act and are required where an action has, will have, or is likely to have a significant impact on a matter of national environmental significance. The Significant Impact Guidelines 1.1 provide a self-assessment process using detailed criteria for conservation categories (i.e., Endangered/Critically Endangered and Vulnerable species and Threatened Ecological Communities) to assist in determining whether a referral is required to be submitted for a decision by the Minister on whether assessment and approval is required under the EPBC Act.

As assessment against the significant impact guidelines is provided within Section 5.2 of the CDM Smith MNES Report (Attachment A). The assessment indicates that the Proposed Action is unlikely to result in a significant impact on any of the known, likely, or potential MNES values.

Weeds of National Significance

One of the primary objectives of the EPBC Act is to conserve Australian biodiversity, including provisions for managing invasive species as threatening processes. The Australian Weeds Strategy, developed by the Commonwealth in collaboration with State and Territory governments, provides a national framework for addressing weed challenges and reducing their environmental impact. Under this strategy, 32 of Australia's most significant weed species are listed as Weeds of National Significance (WoNS). These species were prioritised based on their invasiveness, potential for spread, and environmental, social, and economic impacts. National management strategies and manuals have been published for all WoNS.

Several introduced flora species were observed during field surveys conducted throughout the Proposed Action area, with one of these being classified as a WoNS. A Weed and Pest Management Plan has been prepared for the LEIP Project which outlines mitigation and management measures to be implemented to reduce the impact of pest species (Appendix C of Attachment A).

EPBC Act Environmental Offsets Policy

Environmental offsets must be delivered in accordance with the EPBC Act Environmental Offsets Policy (DCCEEW 2012). This policy outlines the Australian Government's approach to using environmental offsets under the EPBC Act. Offsets are measures that compensate for the residual adverse impacts of an action on the environment. They are considered, where appropriate, during the assessment phase of an environmental impact assessment under the EPBC Act.

The Proposed Action is unlikely to result in a significant impact on any of the known, likely or potential MNES, and as such, no environmental offsets are proposed.

State and Local Legislation

Biosecurity Act 2014

The *Biosecurity Act 2014* (Biosecurity Act) provides legislative measures to manage pests and weeds, diseases, and environmental contaminants, and to address the impacts they have on the economy, environment, agriculture, tourism, and society. Weeds and pests pose one of the most significant threats to environmental values and agriculture within the Disturbance Area and broader region. Accordingly, appropriate management measures will be implemented to restrict the introduction and/or spread of weed species as a means of protecting the values of the surrounding country.

Several introduced flora and fauna species were observed during field surveys conducted throughout the Proposed Action area. A Weed and Pest Management Plan has been prepared for the LEIP Project which outlines mitigation and management measures to be implemented to reduce the impact of pest species (Appendix C of Attachment A).

Fisheries Act 1994

The *Fisheries Act 1994* (Fisheries Act) provides for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to apply and balance the principles of ecologically sustainable development and promote ecologically sustainable development.

The Fisheries Act provides a framework for the sustainable management and conservation of Queensland's fisheries resources, recognising the importance of these resources to the State's economy and environment and further seeks to ensure their long-term viability for the benefit of all stakeholders.

Fields Creek is a green (low impact) waterway for waterway barrier works as mapped under the Fisheries Act. This waterway runs east to west to the north of Jones Road. Fields Creek is proposed to be realigned as a part of the Proposed Action, and has been assessed by C & R Consulting (2024) as a part of a development approval application submitted to the State Government.

Nature Conservation Act 1992

The objective of the *Nature Conservation Act 1992* (NC Act) establishes the objectives, principles, classes, and management of protected areas, and regulates activities that may affect nature conservation.

The field surveys conducted for the Proposed Action have included habitat assessments and identification of flora and fauna listed under the NC Act. Information gathered during the surveys have been used to determine species likelihood of occurrence, and habitat mapping assessments have been prepared to understand the potential impact to fauna foraging, breeding and roosting places throughout the area.

Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) regulates the conservation and management of vegetation communities, providing protection for the following:

- Regional Ecosystems (REs) classified as 'endangered' or 'of concern'
- REs classified as 'least concern' associated with mapped waterways
- Management of category, A, B, C, R and X areas
- Mapped 'essential habitat' for threatened flora and fauna species listed under the NC Act, and

- Specific wetlands as mapped under the VM Act.

Several REs have been mapped throughout the Proposed Action area during ecological field surveys. All ground truthed REs within the Proposed Action area are listed as least concern under the VM Act.

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

A pre-referral meeting was held with DCCEEW on 27 March 2025.

1.3.1 Identity: Referring party

Privacy Notice:

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

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

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

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

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	88152082936
Organisation name	CDM SMITH AUSTRALIA PTY LTD
Organisation address	4000 QLD

Referring party details

Name	Damien Taylor
Job title	Principal
Phone	+61 429 110 858
Email	taylordj@cdmsmith.com
Address	Level 4/140 Ann St, Brisbane City QLD 4000

1.3.2 Identity: Person proposing to take the action

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

No

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

Yes

Person proposing to take the action organisation details

ABN/ACN 44741992072

Organisation name TOWNSVILLE CITY COUNCIL

Organisation address 4810 QLD

Person proposing to take the action details

Name Scott Muller

Job title Program Manager - Lansdown Eco-Industrial Precinct

Phone 0456872581

Email scott.muller@townsville.qld.gov.au

Address 103 Walker Street, Townsville City QLD 4810

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

No

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

No

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

Council recognises environmental sustainability as a guiding principle in its Corporate Plan (Refer to Attachment B). It is committed to avoiding, minimising, and mitigating adverse environmental impacts associated with its operations. Council will continually improve its environmental performance by seeking opportunities to achieve positive environmental outcomes, reduce impact, and encourage a culture of sustainability among its workers and the community.

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

Council is committed to:

- Demonstrated environmental leadership and encouraging its workers and the community to adopt more sustainable lifestyles;
- Effective management and protection of the natural and built environment through the implementation of sustainable growth and development patterns; and
- Carrying out its operations in an environmentally sustainable manner and integrating sustainability into its processes and decision making.

Council has a satisfactory record of responsible environmental management.

Further detail in Attachment B – Corporate Plan_2024 and Attachment C – TCC Environmental Policy

1.3.3 Identity: Proposed designated proponent

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

Yes

Proposed designated proponent organisation details

ABN/ACN 44741992072

Organisation name TOWNSVILLE CITY COUNCIL

Organisation address 4810 QLD

Proposed designated proponent details

Name Scott Muller

Job title Program Manager - Lansdown Eco-Industrial Precinct

Phone 0456872581

Email scott.muller@townsville.qld.gov.au

Address 103 Walker Street, Townsville City QLD 4810

1.3.4 Identity: Summary of allocation

✔ Confirmed Referring party's identity

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

ABN/ACN	88152082936
Organisation name	CDM SMITH AUSTRALIA PTY LTD
Organisation address	4000 QLD
Representative's name	Damien Taylor
Representative's job title	Principal
Phone	+61 429 110 858
Email	taylordj@cdmsmith.com
Address	Level 4/140 Ann St, Brisbane City QLD 4000

✔ Confirmed Person proposing to take the action's identity

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

ABN/ACN	44741992072
Organisation name	TOWNSVILLE CITY COUNCIL
Organisation address	4810 QLD
Representative's name	Scott Muller
Representative's job title	Program Manager - Lansdown Eco-Industrial Precinct
Phone	0456872581
Email	scott.muller@townsville.qld.gov.au
Address	103 Walker Street, Townsville City QLD 4810

✔ Confirmed Proposed designated proponent's identity

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

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

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

No

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

No

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

No

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

No

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

No

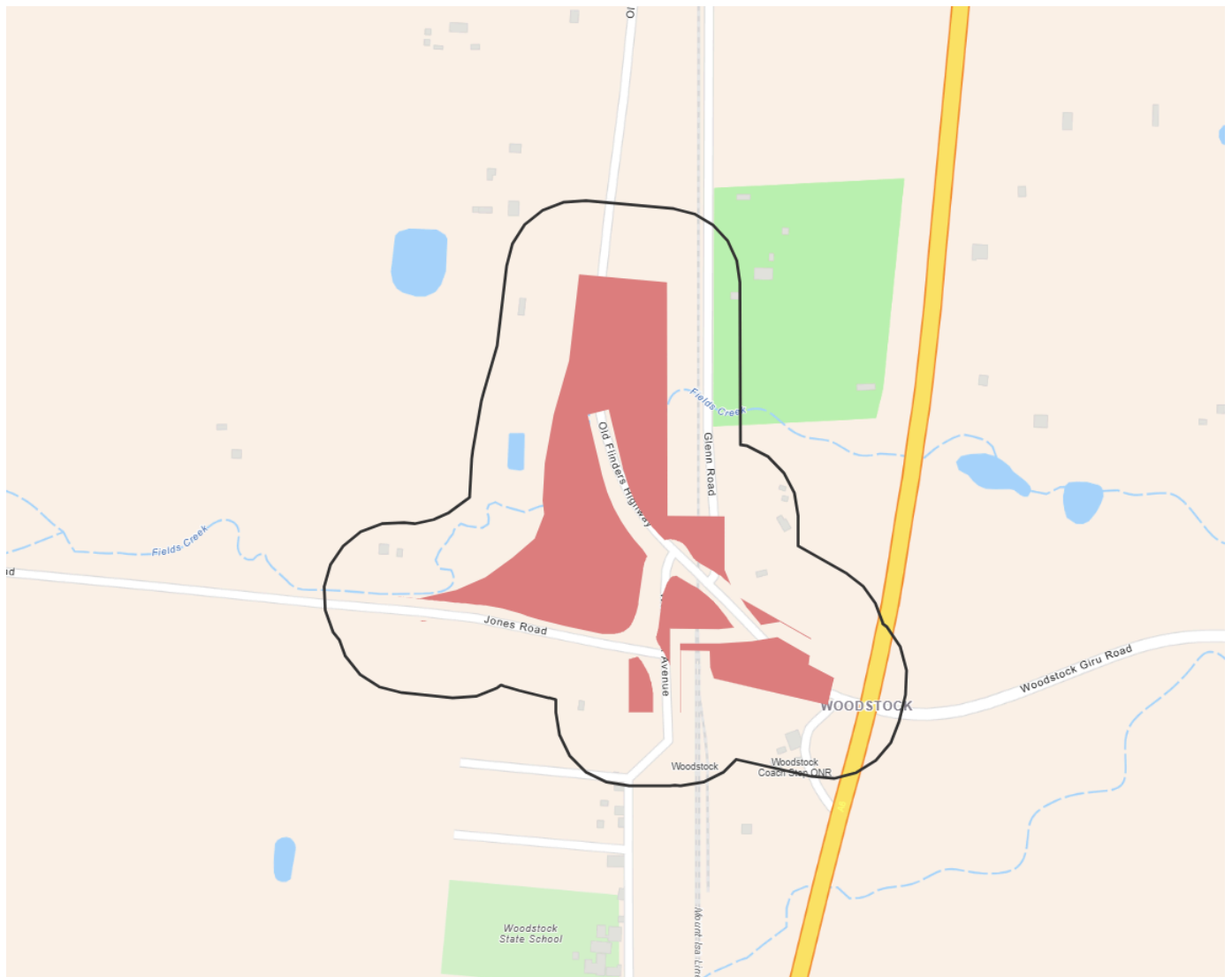
1.4 Payment details: Payment allocation

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

Person proposing to take the action

2. Location

2.1 Project footprint



Project Area: 36.70 Ha Disturbance Footprint: 9.40 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

128 Manton Quarry Road, Calcium, 4816

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

Queensland

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

No

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

The Project is located on road reserve in addition to the following land parcels:

- Lot 5 on Plan RP800794 (Freehold)
- Lot 151 on Plan SP130026 (Lands Lease)
- Lot 74 on Plan RP843344 (Freehold)
- Lot 161 on Plan 130027 (Lands Lease)

Further detail in Section 1.3 of Attachment A – LEIP MNES Report

3. Existing environment

3.1 Physical description

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

The Proposed Action is located to the northeast of the LEIP and expands upon the existing road reserve and intersection between Old Flinders Highway, Woodstock Avenue, Glenn Road and Jones' Road. The Mount Isa Railway Line runs west of Flinders Highway and east of Woodstock Avenue, in a north-south direction, with Fields Creek running through the proposed Disturbance Area.

The Disturbance Area contains mostly non-remnant vegetation, with areas of regrowth vegetation mostly associated with watercourses (Fields Creek) and isolated vegetation patches. The non-remnant vegetation is associated with roads and railway lines, residential land parcels, cleared paddocks and an electrical substation. Two small patches of regrowth vegetation occur within a paddock on Lot 5, RP800794. Within the broader region, land uses predominantly include grazing, however, also include other agricultural activities, mining, forestry, industry and housing.

Fields Creek is mapped as a green (low risk) waterway for waterway barrier works (Fisheries Act) and currently runs along the northern side of Jones Road, from west to east. The creek runs under the Old Flinders Highway, as well as the Queensland Rail railway line, Glenn Road, and the current Flinders Highway. The upstream catchment area of Fields Creek is currently utilised for cattle farming. Several small in-channel farm dams are located along its length and there are no known permanent pools.

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

The Project is wholly located within the TCC local government area (LGA), and in 2020, the LEIP was rezoned from rural to High Impact Industry, as approved by the Department of State Development, Infrastructure, and Planning. The Proposed Action will form a road reserve.

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

There are no outstanding natural features relevant to the Disturbance Area. The area contains low value and mostly non-remnant vegetation.

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

The topography of the Disturbance Area is generally flat with elevation mostly being 64m AHD, dipping to a minimum of 61m AHD within waterways and drainage areas.

3.2 Flora and fauna

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

Fauna

A total of ten fauna species were identified during the AECOM ecological field survey (2024) throughout the Study Area. No conservation significant species were observed during the survey. Surveys conducted by Evolve in 2022, detected the presence of numerous fauna species throughout the wider LEIP Project area, including trace evidence of the Koala (*Phascolarctos cinereus*), and visual sightings of Black-throated finch (southern) (*Poephila cincta cincta*), and Squatter pigeon (southern) (*Geophaps scripta scripta*) (Evolve 2022b). Surveys conducted by EMM in 2021 also observed the Bare-rumped sheathtail bat (*Saccolaimus saccolaimus*) to the north of No Name Road, west of the Study Area. The location of these species sightings relevant to the Proposed Action are outlined within Table 4-2 of Attachment A. It should be noted that no conservation significant species have been observed within the immediate Study Area during any survey to date. The closest observations, including those outlined within Table 4-2 of the MNES Report (Attachment A), have been associated with dams, woodlands and open paddock habitat near the intersection of Jones Road and No Name Road, approximately 700 m west of the Disturbance Area. Throughout all survey periods, birds were the most abundant fauna group present on site. Introduced species observed on site included the Feral pig (*Sus scrofa*), Cattle (*Bos taurus*) and Horse (*Equus caballus*).

Flora

Protected Matters Search Tool (PMST) returned nine flora species as having the potential to occur within 10 km of the Study Area. The species identified in the desktop assessment were subject to a likelihood of occurrence evaluation, considering the known habitat and ecological requirements of the species against the vegetation and habitat types identified in the field survey, cross-checked with available species records in the area. All conservation significant flora species were assessed as unlikely to occur within the Study Area. Ecological surveys conducted by AECOM (Attachment A) identified 50 plant species throughout the Study Area, with 28 of these being introduced flora species. Three species listed as restricted matter under the *Biosecurity Act 2014* (Qld), and one of these species listed as a WoNS. The species included Rubber vine (*Cryptostegia grandiflora*), Siam weed (*Chromolaena odorata*), and Chinee apple (*Ziziphus mauritiana*).

PMST searches did not identify any potential TECs occurring within a 10 km radius of the Study Area. Desktop assessments of state vegetation communities also did not identify any Queensland mapped Regional Ecosystems (REs) that are conducive to a TEC as listed under the EPBC Act. Least concern REs 11.3.30 (*Eucalyptus crebra*, *Corymbia dallachiana* woodland on alluvial plains), and 11.3.35 (*Eucalyptus platyphylla*, *Corymbia clarksoniana* woodland on alluvial plains) were confirmed to be present within the Study Area. Ground truthed vegetation is contained within Table 4-5 and Figure 4-1 of Attachment A. Majority of the Disturbance Area contains non-remnant vegetation, with remnant and regrowth vegetation generally being associated with waterways and small patches of vegetation. In line with desktop searches, however, none of the REs present on site are analogous with TECs as listed under the EPBC Act.

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

The Study Area is highly disturbed and is dominated by non-remnant vegetation, with fragmented patches of regrowth vegetation. The desktop survey identified no TECs occurring within a 10 km radius. No vegetation analogous to TECs was found to occur within the Study Area during the field survey.

Throughout all ecological field surveys, any tracts of vegetation throughout the Study Area were found to be highly fragmented, lacking connectivity to any larger tracts of vegetation throughout the surrounding area due to existing road and rail network, in addition to historical clearing. A level of connectivity is provided by Fields Creek, however, connectivity is disrupted by culverts and farm dams at several locations. Large areas of remnant vegetation to the west of the Study Area, associated with the land parcel Lot 14 on E124325 and Lansdowne Creek, are not expected to be impacted by the Project. Elevated traffic levels along Jones Road during and after the Project may increase the barrier between remnant areas for some terrestrial and arboreal species. Agricultural practices dominate the adjacent landscape, creating fragmentation and barriers to fauna movement depending on the degree of grassland modification, presence of weeds, and level of mobility of the fauna species.

REs 11.3.30 and 11.3.35 were confirmed to be present within the Study Area. Ground truthed vegetation is contained within Table 4-5 and Figure 4-1 of Attachment A. Majority of the Disturbance Area contains non-remnant vegetation, with remnant and regrowth vegetation generally being associated with waterways and small patches of vegetation.

There are no protected areas close to the Study Area, with the nearest protected area being Bowling Green Bay National Park, located approximately 32 km to the northeast. Semi-rural urban and agricultural properties occur in the surrounding Woodstock suburb.

3.3 Heritage

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

There are no Commonwealth Heritage Places located within 10 km of the Study Area. The nearest Cultural Heritage Place is the Ayr Post Office, located approximately 60 km to the east of the Study Area.

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

TCC has engaged the Indigenous stakeholders and their nominated Technical Advisor to conduct a systematic and comprehensive cultural heritage survey and assessment of the wider LEIP Project impact areas. This survey was completed in stages to the satisfaction of the Indigenous stakeholders.

A Cultural Heritage Management Agreement (CHMA) has been prepared in consultation with the Indigenous stakeholders. Engagement with the Indigenous stakeholders is maintained through the ongoing implementation of the agreed and executed CHMA and Reconciliation Action Plan, recognising the Aboriginal Party as a key stakeholder (Attachment E). The Indigenous stakeholders provided a detailed set of Cultural Heritage Management Recommendations (CHMRs), which have been agreed upon and accepted by the Council for implementation during ground disturbance and construction. The Council will arrange appropriate signage at agreed locations to highlight the Aboriginal Party's history in the area and will implement the detailed CHMRs as provided by the Indigenous stakeholders and their Technical Advisor during ground disturbance associated with the project. Follow-up cultural monitoring by the Aboriginal Party will occur during ground disturbance works for the Project.

The Council confirms that the Aboriginal Party considers any Cultural Heritage Management Agreements, Agreed Cultural Heritage Management Recommendations, and Cultural Survey Reports for this project to be confidential documents. Based on this advice, the Council has provided the Cultural Heritage Management Agreement (refer to Attachment E) and the Cultural Heritage Survey Reports (refer to Attachment F for Stage 1 and Attachment G for Stage 2) under strict confidentiality to the DCCEE. It is the express wish of the relevant Aboriginal Party that all information relating to the identification, location, and significance of Indigenous cultural heritage sites, finds, and other values remain confidential to the Aboriginal Party and the Council.

3.4 Hydrology

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

All watercourses within the Study Area are ephemeral and only contain water during the wet season for a short period of time. The nearest perennial natural water source is Lansdowne Creek, located approximately 1 km to the west of the study area. There are also ephemeral dams on properties within the Study Area, such as the dam located on Lot 5, RP800794 along Fields Creek. It is likely that Fields Creek will quickly dry up following the end of the wet season, limiting the potential for pools over the dry season. Additionally, a review of available, historical, aerial imagery suggests that there are no permanent waterholes known to occur upstream of the Proposed Action on Fields Creek, with three other in-channel farm dams all expected to dry out over the course of each year.

Fields Creek is ephemeral and is mapped as a Stream Order 1 watercourse as per the VM Act watercourse drainage map and a green (low impact) waterway for waterway barrier works under the Fisheries Act. The design of the Proposed Action currently overlaps approximately 200 m of Fields Creek. The design case developed by AECOM proposes to realign the creek in a shallow meandering manner to replicate the existing 200 m length of creek being removed and maintain a similar stream sinuosity over the impacted reach. Further information on the diversion of Fields Creek can be found in Section 1.2.2 of the MNES Report (Attachment A).

A Hydraulic Assessment was developed by AECOM for the detailed design of the Proposed Action (Attachment D). Modelling was conducted for existing case and design case for (5% and 1% AEP events). Currently, Fields Creek is sparsely vegetated, so the proposed waterway was modelled to represent a grassy creek with minimal vegetation, with a Manning's n roughness value of 0.04. It is proposed that native grass and plant species will be planted along the realigned waterway so to minimise sediment being transported downstream. Peak velocities from the 1% AEP for existing and design case scenarios demonstrate that the velocity in the proposed waterway realignment is of a similar magnitude to that of the current waterway. An erosion and sediment control plan will be prepared for construction phase of the watercourse realignment.

The design case also proposed installation of several culverts throughout the intersection and adjoining roads and Mt Isa Rail Line. For a minor event (5% AEP) the design alignment is not overtopped by flood water. The Mt Isa Rail Line remains immune to overtopping, which is an improvement on the existing case. For the major event (1% AEP) the design alignment remains largely flood immune. The Mt Isa Rail Line is overtopped in multiple locations up to 200mm for the major event. Detailed results are contained within Attachment D.

No mapped wetlands occur within the Study Area.

4. Impacts and mitigation

4.1 Impact details

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

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

4.1.1 World Heritage

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

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

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

—

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

No

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

*

There are no World Heritage Properties located within a 10 km radius of the Study Area. The nearest World Heritage Property is the Great Barrier Reef, located approximately 33 km to the northeast of the Study Area. There will be no significant impacts to World Heritage Properties as a result of the Proposed Action.

4.1.2 National Heritage

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

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

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

—

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

No

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

*

There are no National Heritage Places located within a 10 km radius of the Study Area. The nearest National Heritage Place is the Great Barrier Reef, located approximately 33 km to the northeast of the Study Area. There will be no significant impacts to National Heritage Places as a result of the Proposed Action.

4.1.3 Ramsar Wetland

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

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

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

Direct impact	Indirect impact	Ramsar wetland
Yes		Bowling Green Bay

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

No

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

*

PMST searches identified one wetland of international importance (Ramsar wetland) within a 10 km buffer of the Study Area. This wetland is the Bowling Green Bay Conservation Park located approximately 30 km northeast of the Study Area. One wetland of national importance under the Directory of Important Wetlands in Australia (DIWA), namely the Serpentine Aggregation, is located approximately 5 km east of the Study Area.

Due to the distance to these wetlands, the extent of the proposed disturbance, and the on site water and sediment practices to be implemented, it is unlikely that these wetlands will be impacted.

4.1.4 Threatened Species and Ecological Communities

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

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

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

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Dasyurus hallucatus</i>	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	<i>Dichanthium setosum</i>	bluegrass
No	No	<i>Egernia rugosa</i>	Yakka Skink
No	No	<i>Elseya irwini</i>	Irwin's Turtle, White-headed Snapping Turtle
No	No	<i>Erythroriorchis radiatus</i>	Red Goshawk
No	No	<i>Eucalyptus raveretiana</i>	Black Ironbox
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
Yes	Yes	<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Leichhardtia brevifolia</i>	
No	No	<i>Macroderma gigas</i>	Ghost Bat
No	No	<i>Neochmia ruficauda ruficauda</i>	Star Finch (eastern), Star Finch (southern)
No	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
No	No	<i>Petauroides minor</i>	Greater Glider (northern), Greater Glider (north-eastern Queensland)
No	No	<i>Petauroides volans</i>	Greater Glider (southern and central)
No	No	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)

Direct impact	Indirect impact	Species	Common name
Yes	Yes	Poephila cincta cincta	Southern Black-throated Finch
No	No	Rostratula australis	Australian Painted Snipe
No	No	Saccolaimus saccolaimus nudiclunatus	Bare-rumped Sheath-tailed Bat, Bare-rumped Sheath-tail Bat
No	No	Tephrosia leveillei	
No	No	Tyto novaehollandiae kimberli	Masked Owl (northern)

Ecological communities

—

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

Yes

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

Desktop searches identified 36 threatened species and 23 migratory species as listed under the EPBC Act with the potential to occur within a 10 km radius of the Study Area. Potential threatened species included nine flora species and 27 fauna species. A likelihood of occurrence assessment was conducted as a part of the desktop assessment to assist in informing field surveys and impact assessments. A total of 17 EPBC Act listed fauna species were identified as having the potential to occur or are likely to occur within the Study Area. This included seven birds, one mammal and 12 migratory birds. All nine flora species returned within the PMST search were considered unlikely to occur.

MNES values considered known, likely or having potential to occur within the Study Area, were subject to a two-step impact assessment process. A screening assessment reviewed the potential nature, magnitude and consequence of Proposed Action impacts to indicate vulnerability of MNES that warranted further assessment via the significant impact assessment process. Based on the findings of the screening assessment, the Black-throated finch (southern) and Squatter pigeon (southern) have potential to be directly or indirectly impacted by the Proposed Action.

Squatter pigeon (southern)

- This species is considered likely to occur within the Study Area due to the presence of suitable habitat and ALA records within the area. Any individuals that occur within the Study Area are not considered to constitute an important population. Project activities will result in less than 1 ha of suitable habitat directly impacted via vegetation clearing, which includes remnant open woodland and non-remnant regrowth Melaleuca woodland close to water bodies.
- Given the vast areas of suitable habitat within the wider local area, this reduction in habitat is considered minor and unlikely to affect the persistence of the species. Any increased pest presence, increased weeds in the ground layer and temporarily increased noise and activity during construction may indirectly affect this species. However, pest levels are unlikely to be exacerbated beyond current levels. Potential indirect impacts will be low and managed via the mitigation measures detailed in the MNES Report. Due to the prominence of the species in the area and suitable habitat, there is potential that it may be impacted by the Proposed Action.

Black-throated finch (southern)

- Suitable habitat for the species occurs among remnant grassy open woodland, and some non-remnant areas may also be suitable for the Black-throated finch (southern), amounting to 9.4 ha of marginally suitable habitat. Fields Creek is an ephemeral creek that is likely to provide suitable habitat in the wet season, along with farm dams and ponds in the area.
- The species is considered locally common in the Townsville region, and is considered known or very likely to occur in the Study Area as per species distribution map on the species' SPRAT page. Although the species was not detected during surveys, suitable habitat was found to occur and may be impacted by the Proposed Action.

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

*

No

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

Detailed significant impact assessments can be found within the MNES Report (Attachment A). A summary of the assessments for the Squatter pigeon (southern) and Black-throated finch (southern) follows.

Squatter pigeon (southern)

- This species was observed during field surveys throughout the wider LEIP Project area. The closest observations of the Squatter pigeon (southern) to the Proposed Action have been associated with farm dams, woodlands and open paddock habitat near the intersection of Jones Road and No Name Road, approximately 700 m west of the Disturbance Area. Habitat for the species comprises open forest to sparse, open woodlands on well-draining gravelly, sandy or loamy soils, generally within close proximity to a permanent water source. Assessment of the habitat throughout the Referral Area indicate that since there is no permanent water body within the Study Area, breeding habitat is not present. Seasonal waterbodies occur throughout the Study Area, including farm dams and low-order streams. Foraging resources suitable for the species (i.e. native grasses) were present in the Study Area, and the ground structure intermittently comprised of open and tussock vegetation that is preferred by the species. However, Lot 5, RP800794 was found to comprise dense vegetation in the ground layer (generally > 60% vegetated ground cover) which is not preferred (Department of Agriculture Water and the Environment, 2022). As such only parts of the Study Area are likely to contain suitable vegetation structure for the Squatter pigeon (southern) foraging, however the entirety of the Study Area is conservatively considered as foraging habitat for the species (Attachment A).
- Significant impact assessments identified that a significant impact to this species as a result of the Proposed Action is unlikely due to the small area of low quality habitat to be removed, the Study Area not containing an important population for the species, the highly fragmented nature of the Study Area and the lack of nearby permanent water bodies.

Black-throated finch (southern)

- The species' habitat is generally associated with grassy, open woodlands and forests, typically dominated by Eucalyptus, Corymbia and Melaleuca. This species was observed during field surveys throughout the wider LEIP Project area. The closest observations of the Black-throated finch (southern) to the Proposed Action have been associated with farm dams, woodlands and open paddock habitat near the intersection of Jones Road and No Name Road, approximately 700 m west of the Disturbance Area. Black-throated finches require habitat where there is access to seeding grasses and water and will utilize a variety of different habitats for foraging, particularly in north Queensland during the wet season. Permanent water sources are a critical aspect of the Black-throated finch's habitat, as they provide refuge during dry spells. Throughout the Study Area, suitable breeding habitat is available for this species among shrubs and trees within close proximity to ephemeral water sources such as Fields Creek and farm dams. Foraging habitat for the Black-throated finch was found to be minimal during the AECOM ecology survey (2024), with a low cover of foraging grasses being present. The survey, however, was conducted during the dry season, where much of the foraging material has hayed off. Evolve ecology surveys (2022) determined that the Study Area was likely to support foraging habitat for the species.
- Significant impact assessments identified that a significant impact to this species as a result of the Proposed Action is unlikely due to the small area of low quality habitat to be removed and the highly fragmented nature of the Study Area and the lack of nearby permanent water bodies. Habitat within the Study Area also primarily consists of cleared paddock that has a low proportion of grasses suitable for foraging, with occasional trees and a low value seasonal stream.

Implementation of measures to mitigate potential impacts will also be employed on site. This includes implementation of the MNES Management Plan and the Weed and Pest Management Plan, attached to Attachment A.

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

No

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

*

The Action is not considered to be a controlled action.

The Proposed Action is proposed to be constructed within a highly disturbed area used for agriculture and grazing. The Proposed Action is also associated with an intersection upgrade, expanding on existing road infrastructure. The surrounding environment comprises mostly non-remnant vegetation with little ecological value. Waterways within the area are ephemeral, with no permanent water sources available nearby.

The only MNES that have the potential to be impacted are the Squatter pigeon (southern) and Black-throated Finch (southern). Both of these MNES have been subject to significant impact assessments which have determined that significant impacts are unlikely due to the characteristics of the Disturbance Area.

Potential indirect impacts to MNES will be managed through:

- Implementation of the Weed and Pest Management Plan (Appendix C of Attachment A)
- Implementation of MNES Management Plan (Appendix B of Attachment A), including species specific mitigation measures
- Clear demarcation of clearing boundaries
- Sequential clearing practices

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

The MNES Management Plan (Appendix B of Attachment A) will be implemented throughout the course of the LEIP Project, including for construction of the Proposed Action. Some mitigation measures include:

- Where removal of remnant vegetation cannot be avoided, several measures will be implemented to mitigate and manage the impact on native vegetation communities.
 - Project planning to avoid or minimise vegetation clearing in sensitive environments, specifically riparian areas and remnant vegetation.
 - The Environmental Management Plan (Construction) (EMP(C)) will provide a map of areas to be cleared and retained, methods for clearing, and other relevant environmental protection measures.
 - Workers will be informed of vegetation management requirements detailed in the EMP(C) through inductions and work instructions.
 - Topsoil requiring removal will be stockpiled and reapplied in the same land zone from where it was removed for any rehabilitation works.
- To minimise and manage impacts in both terrestrial and aquatic environments, the following measures will be implemented
 - Engage suitably qualified fauna spotter-catchers to conduct pre-clearance habitat searches and be present during vegetation clearing activities to minimise harm to fauna.
 - The EMP(C) will provide clear guidance on areas to be cleared and retained, methods for clearing, the role of the spotter-catcher, and other relevant environmental protection measures.
 - Identify and map clear no-go zones to prevent unauthorised disturbance of sensitive vegetation and habitat, such as identified nests, potential breeding places, trees to be retained, and important microhabitat for conservation-significant species. Impacts on important microhabitat, such as hollow-bearing trees and large hollow logs, will be minimised.
 - Clearly mark habitat trees to be retained.
 - Plan and conduct vegetation clearing in a sequential manner to direct any escaping fauna to adjacent native vegetation.
 - Minimise impacts on fish passage, migration, and movement barriers during the design and construction of instream works. Waterway works should be paused or completed, and bunds removed during low flows when the flow is contained within the low flow channel.
 - The design has minimised instream impacts and included suitable design measures for mitigating and/or treating pollutants.
 - A Weed and Pest Management Plan has been developed to be implemented to control terrestrial and aquatic weeds and pests (Appendix C of Attachment A).
 - An MNES Management Plan has been developed for the LEIP Project outlining how impacts on listed threatened species and communities and their habitat, will be avoided, mitigated, and managed (Appendix B of Attachment A).
- To reduce the likelihood of injury or mortality to fauna, the following mitigation measures will be implemented:
 - Engage suitably qualified fauna spotter-catchers to conduct pre-clearance habitat searches and be present during vegetation clearing activities to minimise harm to fauna. Fauna spotter-catchers will capture and relocate fauna prior to clearing.
 - Always maintain a clear escape path for fauna during construction works.
 - Maintain a record of any injured, sick, and dead vertebrate fauna before, during, and after construction and operation. Any fauna injured by project activities should be transported to a vet or recognised wildlife carer.
 - Limit vegetation clearing to daytime hours to reduce impacts from construction light and noise on nocturnal species.
 - Monitor trenches regularly during construction to reduce the risk of fauna entrapment. Cover trenches where possible.
- Indirect impacts to waterways can generally be managed through the implementation of construction environmental management measures. These mitigation measures include:

- Developing an appropriate spill prevention and response plan to cover project activities and the types and quantities of fuel, oil, and chemicals held.
- Locating stockpiling/laydown areas, plant, and equipment storage areas away from Fields Creek and its tributaries, within already cleared or disturbed areas.
- Completing construction outside of the wet season when creeks are not inundated or flowing, where possible.
- Developing an Erosion and Sediment Control Plan for the project in accordance with Best Practice Erosion and Sediment Control Guidelines (International Erosion Control Association, 2019).
- Undertaking rehabilitation works to minimise long-term clearing impacts within the disturbance corridor, including a revegetation strategy focused on restoring ecological values in key areas.
- The risk of potential impacts related to the establishment and proliferation of weeds and feral animals should be mitigated and managed through measures included in the Weed and Pest Management Plan (Appendix C).
- Construction works should be conducted during daylight hours wherever possible to avoid the need for temporary lighting. If temporary lighting is required, it will be minimised and directed away from vegetated areas to reduce light spillage. Permanent lighting for the Proposed Action will be managed to ensure it is directed to targeted areas and does not create light pollution beyond the target area.
- Dust generation during the construction phase should be minimised, especially around sensitive environments such as remnant vegetation and watercourses. This can be achieved through dust suppression measures, including the use of water trucks and sprinklers, where necessary.

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

While the Proposed action will impact land containing habitat for threatened species, given there are no significant residual impacts, offsets are not required

4.1.5 Migratory Species

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

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

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

Direct impact	Indirect impact	Species	Common name
No	No	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	No	<i>Crocodylus porosus</i>	Salt-water Crocodile, Estuarine Crocodile
No	No	<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Motacilla flava</i>	Yellow Wagtail
No	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew

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

No

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

*

MNES values found to be present within the Study Area included potential presence of 12 migratory fauna species (with three listed as both threatened and migratory).

The likelihood of occurrence assessment identified the following EPBC Act listed migratory species as being known, likely or having the potential to occur within the Study Area:

- Sharp-tailed sandpiper (Potential)
- Latham's snipe (Potential)
- White-throated needletail (Likely, flyover only)
- Fork-tailed swift (Likely, flyover only)
- Oriental cuckoo (Likely)
- Gull-billed tern (Potential)
- Barn swallow (Potential)
- Caspian tern (Potential)
- Black-faced monarch (Potential)
- Satin flycatcher (Potential)
- Osprey (Potential)
- Glossy ibis (Likely)

Impact assessment determined that the Proposed Action is unlikely to result in an impact on any of the known, likely or potential MNES values for these species within the Study Area. Seven migratory species were observed during field surveys, however, these species were all recorded well outside of the Study Area. Habitat within the Study Area for migratory species was found to be marginal, with ample habitat being available throughout the broader LEIP Project area and region for these species.

4.1.6 Nuclear

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

No

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

*

The action is not a nuclear action

4.1.7 Commonwealth Marine Area

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

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

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

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

No

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

The Commonwealth Marine Area is not located within a 10 km radius of the Study Area. The Commonwealth Marine Area is located offshore, approximately 55 km to the northeast of the Study Area. There will be no significant impacts to the Commonwealth Marine Area as a result of the Proposed Action.

4.1.8 Great Barrier Reef

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

No

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

The Great Barrier Reef Marine Park is not located within a 10 km radius of the Study Area. The Great Barrier Reef Marine Park is located offshore, approximately 33 km to the northeast of the Study Area. There will be no significant impacts to the Great Barrier Reef as a result of the Proposed Action.

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

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

No

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

*

The action is not a coal mining or coal seam gas development.

4.1.10 Commonwealth Land

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

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

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

—

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

No

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

*

There is no Commonwealth Land relevant to the Proposed Action and there will be no impacts to Commonwealth Land as a result of the Proposed Action.

4.1.11 Commonwealth Heritage Places Overseas

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

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

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

—

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

No

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

There are no Commonwealth heritage places overseas relevant to the Study Area and there will be no significant impacts to Commonwealth heritage places overseas as a result of the Proposed Action

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

None

Conclusion on the likelihood of unlikely significant impacts

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

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

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

No

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

The Study Area is constrained by existing infrastructure and feasibility considerations. As such, the only alternative is to not undertake the action. The direct consequences of not proceeding with the proposed action are the inability to effectively and safely access and use the LEIP, and loss of sustained positive economic opportunities for the locality and the region. The potential positive impact of not proceeding with the action is avoiding the potential environmental impacts. The Proposed Action is anticipated to have no significant impact on land, water or air (and associated physical, biological and social impacts) and involves clearing of disturbed and fragmented vegetation.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	02/05/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment B - Townsville City Council Corporate Plan.pdf Townsville City Council's Corporate Plan 2021-2026	31/12/2020	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment B - Townsville City Council Corporate Plan.pdf Townsville City Council's Corporate Plan 2021-2026	30/12/2020	No	High
#2.	Document	Attachment C - Townsville City Council Environmental Policy.pdf Environmental Policy for Townsville City Council	23/12/2022	No	High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	02/05/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment E - CHMA.pdf LEIP Cultural Heritage Management Agreement	14/11/2021	Yes	High
#2.	Document	Attachment F - CHISA Stage 1.pdf Cultural heritage survey and impact assessment report for LEIP stage 1	30/04/2022	Yes	High
#3.	Document	Attachment G - CHISA Stage 2.pdf Cultural heritage survey and impact assessment report for LEIP stage 2	30/08/2023	Yes	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High
#2.	Document	Attachment D_Appendix B - Hydraulic Assessment - LEIP Roads.pdf Hydraulics assessment for LEIP	31/05/2024	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

4.1.4.6 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
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#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High
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4.1.4.9 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A_MNES Report.pdf MNES report for Old Flinders Hwy Upgrade. The purpose of this report is to describe the existing environmental values within the Proposed Action area	01/05/2025	No	High

5.2 Declarations

✔ Completed Referring party's declaration

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

ABN/ACN	88152082936
Organisation name	CDM SMITH AUSTRALIA PTY LTD
Organisation address	4000 QLD
Representative's name	Damien Taylor
Representative's job title	Principal
Phone	+61 429 110 858
Email	taylordj@cdmsmith.com
Address	Level 4/140 Ann St, Brisbane City QLD 4000

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

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

☒ By checking this box, I, **Damien Taylor of CDM SMITH AUSTRALIA PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

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

✔ Completed Person proposing to take the action's declaration

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

ABN/ACN	44741992072
Organisation name	TOWNSVILLE CITY COUNCIL
Organisation address	4810 QLD
Representative's name	Scott Muller

Representative's job title	Program Manager - Lansdown Eco-Industrial Precinct
Phone	0456872581
Email	scott.muller@townsville.qld.gov.au
Address	103 Walker Street, Townsville City QLD 4810

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

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

☒ I, **Scott Muller of TOWNSVILLE CITY COUNCIL**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

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

☒ Completed Proposed designated proponent's declaration

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

Same as Person proposing to take the action information.

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

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

☒ I, **Scott Muller of TOWNSVILLE CITY COUNCIL**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

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