Decommissioning of existing overhead assets and installation of an underground high-voltage powerline

Application Number: **02574** Commencement Date: **30/08/2024** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Decommissioning of existing overhead assets and installation of an underground high-voltage powerl

1.1.2 Project industry type *

Energy Generation and Supply (non-renewable)

1.1.3 Project industry sub-type

Transmission Line

1.1.4 Estimated start date *

01/04/2025

1.1.4 Estimated end date *

01/04/2028

1.2 Proposed Action details

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

The proposed action will involve the disconnection and removal of existing electrical infrastructure (overhead powerlines and poles) and the installation of an underground high-voltage powerline of approximately 4,200 m in length, including all necessary ancillary electrical infrastructure (e.g. cable joining pits), access tracks (excluding existing/established access tracks), and temporary impacts from trenching activities, underboring of creeks and roads, and the commissioning and decommissioning of sediment control structures as below:

- Disconnection and removal of existing overhead 132kV powerlines and poles from the Causeway (from designated Area) northward to near the Molonglo River
- Disconnection and removal of existing overhead 11kV powerlines and poles from the eastern end of Eyre St (from designated area) southward to the north of the Railway Station
- Installation of new conduits and cables from the Causeway (Territory Land) northward to the Wetlands and then southward to near Eastlake Zone Substation (designated area)
- Installation of new conduits and cables from Eyre St (Territory Land) eastward to Jerrabomberra creek and then north-eastward to near East Lake Zone Substation (designated area)

Approximately 87% of the proposed impact area is situated within the Jerrabomberra Wetlands Nature Reserve, with the remaining 13% of the proposed impact area split across a number of other public and privately tenured blocks (see Section 2.2.5 of this referral).

All construction and/or demolition works undertaken within proximity to indicative roosting areas and foraging habitat for migratory shorebird species will be restricted to between 1 August and 31 March inclusive to ensure that direct impacts (e.g. habitat disturbance) and indirect impacts (e.g. noise pollution, vibration etc.) on these species are minimised as far as practicable (see Attachment A, Section 3.3, Page 15 - 16).

As soon as practicable following construction, any area within Jerrabomberra Wetlands Nature Reserve in which vegetation disturbance occurs is to be reinstated to the same or similar condition it was in prior to undertaking the proposed development (see Attachment A, Section 3.3, Page 16).

The proposed above activities will involve clearance of vegetation through trenching and installation of underbore launch/receival pits and through additional impacts such as construction of temporary access tracks etc.

The nominal impact figure illustrating the above is provided as Attachment B.

Works are to be undertaken during daylight hours (7:00 - 17:00), primarily between Monday - Friday.

Project area = 32.83 ha

Disturbance footprint = 3.40 ha

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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)

—

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

The project forms part of a long-term broader works involving activities that are under the jurisdiction of the ACT Environment, Planning, and Sustainable Devleopment Directorate (EPSDD) that occur within non-Designated Land. These works include decommissioning the existing Causeway switching station and associated overhead sub transmission lines located within the Territory land.

The larger project helps to address the twin needs for improved electrical network performance and capacity whilst improving the urban amenity and land value associated with new urban development in East Lake and Kingston Foreshore.

The following staged approach of the above larger action is relevant to the proposed action:

Stage 1

Stage 1 work will be undertaken in the South to re-direct the existing overhead 132kV line Harman – Causeway to Harman – East Lake.

Stage 2

Stage 2 work will be undertaken:

- In the North to redirect both 132kV City East – Causeway and 132kV Bruce – Causeway to City East – East Lake and Bruce – East Lake.
- In Kingston to redirect existing 132kV underground cables Telopea - Causeway to Telopea – East Lake. This will also include relocation of 11kV network near the Causeway.

Stage 3

Stage 3 will be the decommissioning of the Causeway switching station (dismantling of all electrical equipments, buildings, fences).

Additional components of the larger project

The upgrade of the East Lake urban renewal precinct also forms a greater part of the broader project, which has been under consideration for over 20 years, and each component of the project has different timing, financial and legislative implications.

Future components of the larger action will include upgrades to the Canberra Railway Precinct (Territory owned land) and Mildura Street Precinct (mostly privately leased land).

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

Below are the following instruments and policies applicable to the proposed action with a brief explanation of their relevance:

Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The project area is likely to support some degree of foraging and/or movement habitat for a number of bird species listed as threatened and/or migratory pursuant to the EPBC Act (refer to Section 4.1.4 of this referral).

1. Threatened Fauna (excluding threatened shorebirds)

With reference to the EPBC Act Significant Impact Guidelines, given the proposed mitigation measures (refer to Attachment A, Section 3.3, Page 15 - 16) and highly disturbed condition of much of the study area (refer to Attachment A, Section 2.2, Page 5 - 7), the proposed development is unlikely to result in a ‘significant impact’ upon any fauna species (with the exception of threatened shorebird species) listed as threatened pursuant to the EPBC Act.

2. Threatened and/or Migratory Shorebirds

From August to March inclusive, parts of the Jerrabomberra Wetlands Nature Reserve are known to support foraging and roosting habitat for Latham’s Snipe (EPBC Act Vulnerable/Migratory), and to a lesser extent, other migratory shorebirds such as Australian Painted-snipe (EPBC Act Endangered/Migratory) and Curlew Sandpiper *Calidris ferruginea* (EPBC Act Critically Endangered/Migratory).

The proposed development in an earlier iteration of design was referred to the Commonwealth Minister for the Environment (the 'Minister') under the EPBC Act (ref:2009/5253), with a 'not controlled action – particular manner' notice of decision issued on 20 January 2010. The issued notice of decision for the proposed development stipulates that the proposed action is not a controlled action provided that the following mitigation measures are taken to avoid significant impacts on migratory species.

"Paragraph 1. To avoid disruption of the lifecycle of an ecologically significant proportion of the population of a migratory species:

1. *Construction or removal works within the Jerrabomberra Wetlands Nature Reserve associated with the action must not occur between 1 October and 31 March inclusive;*

Paragraph 2. Avoidance of substantial modification or destruction of an area of important habitat for a migratory species

1. *Revegetation of the Jerrabomberra Wetlands Nature Reserve must occur where the disturbance footprint of the action lies within the reserve.*
2. *Disturbance impacts on the Jerrabomberra Wetland Nature Reserve must not extend outside the stated disturbance footprint of the action."*

In light of the above, should the proposed development be undertaken in the manner stated in the notice of decision, it is unlikely that the proposed development would result in a 'significant impact' upon any EPBC Act listed entity.

Notwithstanding the above, as the layout of the proposed development has changed substantially (i.e. modifications to underground powerline alignment) since the action was referred in 2010 (ref:2009/5253), this referral decision no longer stands. For legal certainty regarding proposed impacts on MNES, it has been recommended that the proposed action in its current form be referred under the EPBC Act.

Planning and Land Management Act 1988 (PaLM Act)

A large component of the impact area is located within a 'Designated Area' per the National Capital Plan. Pursuant to the PaLM Act, any alteration to buildings or structures, demolition, landscaping or excavation works within Designated Areas require the prior written approval of the National Capital Authority (NCA) or as a 'Works Approval'. There are no exemptions for 'Works Approval' under the PaLM Act.

Australian Capital Territory Legislation

Planning Act 2023 (Planning Act)

Works in the portions of the study area that are identified as Territory Land are subject to approval by the ACT EPSDD.

Urban Forest Act 2023 (UF Act)

No part of the study area in which mature trees were recorded meets the definition of a 'built-up urban area' per the definition in the UF Act, and all mature trees recorded within the study area are within a Designated Area, within which proposed works are subject to approval by the NCA. Therefore, at present, the UF Act does not apply to any tree within the study area.

Pest Plants and Animals Act 2005

Several plant species listed as 'pest plants' under the ACT *Pest Plants and Animals Act 2005* were recorded within the study area. Control of 'pest plants' recorded within the study area as prescribed in the *Pest Plants and Animals Act 2005* is recommended.

ACT Heritage Act 2004

Two sites indentified within the project area are listed on the ACT Heritage Register under the ACT Heritage Act 2004. The proposed action will not diminish the heritage significance of these two sites provided all trenches will be remediated and the ground level restored.

National Capital Plan 1990

The proposed action is located within a designated area of the National Capital Plan and identified as being consistent with the planning controls in the National Capital Plan.

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. *

The original development application (DA [DA No. 202139732]) was publicly notified by EPSDD from 30 January 2023 to 17 February 2023 with five submissions received during public notification, and it is noted that the NCA did not previously undertake public notification for the works approval (WA) modification (WA102683).

Evidence of ACT Representative Aboriginal Organisation (RAO) Consultation is documented in Attachment D (Page 31, Item 4.4).

No further community consultation has been undertaken by the proponent or any other consultants prior to lodgment of this referral. However, the five submitters who had previously commented on the DA were consulted on the new alignment.

Please note that Attachment D (Cultural Heritage Assessment, April 2024) will not be made publicly available due to cultural sensitivity reasons.

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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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details	
ABN/ACN	50607364358
Organisation name	CAPITAL ECOLOGY PTY LTD
Organisation address	2620 NSW

Referring party details	
Name	Robert Speirs
Job title	Director / Principal Ecologist
Phone	0412474415
Email	rob@capitalecology.com.au
Address	PO Box 854, Gungahlin ACT 2912

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	27105505367
Organisation name	Suburban Land Agency

Organisation address	2602 ACT

Person proposing to take the action details

Name	Michael Britton
Job title	Project Manager - Urban Estates
Phone	02 6207 9530
Email	michael.britton@act.gov.au
Address	Dickson Office Building, 480 Northbourne Avenue, Dickson ACT 2602

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. *

The ACT Suburban Land Agency (SLA) is the proponent for the proposed action. The SLA (previously the Land Development Agency) is an experienced proponent regarding the preparation and responsibility for referrals under the EPBC Act. The proposed action would be delivered in accordance with relevant ACT Government policies and guidelines.

There are no past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the person proposing to take the action.

The proponent for the proposed action has a satisfactory record of responsible environmental management.

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

The SLA is not a corporation.

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	27105505367
Organisation name	Suburban Land Agency
Organisation address	2602 ACT

Proposed designated proponent details

Name	Michael Britton
Job title	Project Manager - Urban Estates
Phone	02 6207 9530
Email	michael.britton@act.gov.au
Address	Dickson Office Building, 480 Northbourne Avenue, Dickson ACT 2602

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	50607364358
Organisation name	CAPITAL ECOLOGY PTY LTD
Organisation address	2620 NSW
Representative's name	Robert Speirs
Representative's job title	Director / Principal Ecologist
Phone	0412474415
Email	rob@capitalecology.com.au
Address	PO Box 854, Gungahlin ACT 2912

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	27105505367
Organisation name	Suburban Land Agency
Organisation address	2602 ACT
Representative's name	Michael Britton
Representative's job title	Project Manager - Urban Estates
Phone	02 6207 9530
Email	michael.britton@act.gov.au
Address	Dickson Office Building, 480 Northbourne Avenue, Dickson ACT 2602

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

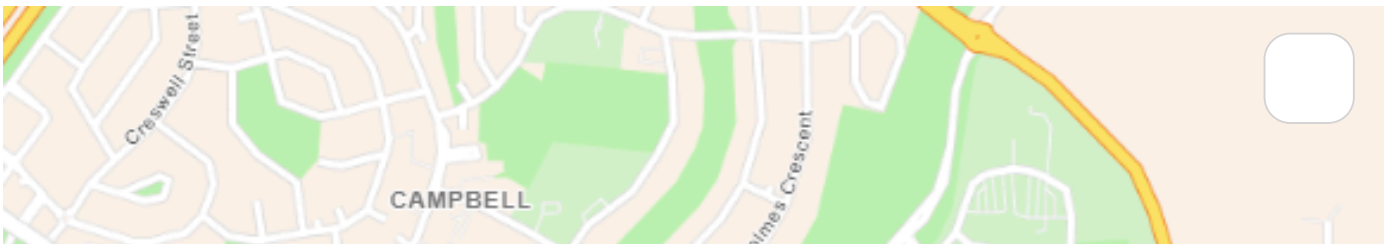
1.4 Payment details: Payment allocation

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 (32.83 Ha)
Disturbance footprint (3.4 Ha)

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Dairy Road, Fyshwick, ACT

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

Australian Capital Territory

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? *

Block 20, Section 6, Kingston – ACT EPSDD Parks and Conservation - Nature Conservation Reserve

Block 5, Section 44, Kingston – ACT TCCS - Unleased

Block 1, Section 68, Fyshwick – ACT EPSDD - Nature Conservation Reserve

Block 2, Section 66, Fyshwick – ACT EPSDD - Nature Conservation Reserve

Block 4, Section 38, Fyshwick – ACT EPSDD - Nature Conservation Reserve

3. Existing environment

3.1 Physical description

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

The project area for the purpose of this referral encompasses multiple urban blocks in Fyshwick and Kingston, ACT (refer to Section 2.2.5 of this referral) and is partially bisected by Jerrabomberra Creek and Kelly's Swamp and associated wetland areas. To the north of Kelly's Swamp, the project area is occupied by Dairy Flat, an area of the Jerrabomberra Wetlands Nature Reserve primarily under lease for grazing of cattle. To the south of Kelly's Swamp, the project area is primarily occupied by public-use areas of the Jerrabomberra Wetlands Nature Reserve and other public infrastructure.

The project area and the surrounding Dairy Flat and Kingston areas have been subject to extensive historic modification following European occupation, including intensive floodplain pasture improvement and cropping, facilitation of military training exercises, and grazing of dairy cattle (see Attachment A, Section 2.1 - 2.2, Page 5 - 7).

As described above, and in Attachment A (Section 2.1 - 2.2, Page 5 - 7), following extensive historic and recent vegetation disturbance and modification, the project area is largely characterised by a groundstorey dominated by exotic annual and perennial grasses. A number of very small, narrow patches of understorey vegetation supporting a non-dominant component of disturbance-tolerant native perennial grasses exist in the south-west of the project area.

A number of small patches of riparian/floodplain vegetation exist throughout the project area. These patches are concentrated in those areas bordering Jerrabomberra Creek and surrounding floodplain paleochannels and first order streams in the Dairy Flat and Kellys Swamp areas. Patches of riparian vegetation are primarily characterised by heavily grazed exotic perennial vegetation and exotic trees including Crack Willow *Salix fragilis* and Elm *Ulmus spp*. Some sparse to moderately dense native fringing vegetation exists within the project area, primarily concentrated along of Jerrabomberra Creek and associated paleochannels (refer to Attachment A, Figure 3a – 3g, Page 30 - 35).

A number of patches of planted local and non-local native trees and shrubs exist within the project area south of Dairy Flat, with the most extensive patches being those associated with public use areas (e.g. foot/bicycle trails, birdwatching areas) within the Jerrabomberra Wetlands Nature Reserve (refer to Attachment A, Figure 6a - 6c, Page 44 - 46).

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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

The project area occupies multiple blocks (see Section 2.2.1 of this referral) over a large area encompassing a number of land uses (Attachment A, Figure 1 – 3g, Page 27 - 35) including:

Nature Reserve - Jerrabomberra Wetlands Nature Reserve (managed by the ACT Woodlands & Wetlands Trust [WWT] and ACT Parks & Conservation Service [PCS])

Private cattle grazing lease – Within the northern section of Jerrabomberra Wetlands Nature Reserve

Public roads – Dairy Road, Fyshwick

Public infrastructure – East Lake Zone Substation (managed and operated by EvoEnergy)

As the proposed action is largely related to the decommissioning or upgrade of existing electrical infrastructure, and installation of new underground electrical infrastructure, the proposed action will not result in any change to existing uses for the project area following construction.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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

Jerrabomberra Wetlands Nature Reserve (including all wetland areas and Jerrabomberra Creek)

The Jerrabomberra Wetlands Nature Reserve is a Nationally Important Wetland, and one of the most well-known wetland areas in the ACT. The Jerrabomberra Wetlands Nature Reserve, including wetland areas, Jerrabomberra Creek and associated exotic and native (remnant/planted) vegetation provides year-round habitat for a substantial number of fauna species including frogs, woodland birds, mammals (including Platypus *Ornithorhynchus anatinus* and Rakali *Hydromys chrysogaster*). Notably, the Jerrabomberra Wetlands Nature Reserve also supports seasonal foraging/roosting habitat for Latham's Snipe *Gallinago hardwickii* (EPBC Act Migratory/Vulnerable), and to a lesser extent, Sharp-tailed Sandpiper *Calidris accuminata* (EPBC Act Migratory/Vulnerable), Curlew Sandpiper *Calidris ferruginea* (EPBC Act Critically Endangered), Nuviak Bar-tailed

Godwit *Limosa lapponica baueri* (EPBC Act Vulnerable/Migratory), and Australian Painted Snipe *Rostratula australis* (EPBC Act Endangered). The Jerrabomberra Wetlands Nature Reserve supports habitat for a number of other migratory shorebird species on a rare/very rare/vagrant basis (see Section 4 of this referral).

Approximately 83% of the proposed disturbance footprint is within the Jerrabomberra Wetlands Nature Reserve.

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 action is not to be undertaken in a marine area.

The Jerrabomberra Wetlands are a low-lying area within the Canberra region at around 557 m above sea level (ASL) with little variation in elevation. Jerrabomberra Creek, backwaters, and the silt trap have an elevation of 556 m ASL. The highest area is west of the Wetlands visitors' car park at 559 m ASL.
Between Jerrabomberra Creek and The Causeway Residential area there is also little variation in elevation from 556m ASL at the Creek to 559 m ASL. Towards the east of the project area, the area is slightly higher to 562m to 564m ASL.

A significant topographical characteristic of the Jerrabomberra Wetlands is its low-lying nature compared to surrounding areas and relative isolation, providing a unique scenic perspective from which to view the city and surrounding hills. A number of watercourses and filled paleochannels form part of this landscape.

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.

A comprehensive Ecological Impact Assessment was undertaken by Capital Ecology in 2024, provided as Attachment A. General descriptions of the flora and fauna and their habitats within the study area assessed by Capital Ecology are provided below.

General Vegetation Condition

Following extensive historic and recent vegetation disturbance and modification, the study area is largely characterised by a groundstorey dominated by exotic annual and perennial grasses such as Phalaris *Phalaris aquatica*, Paspalum *Paspalum dilatatum*, and Tall Fescue *Festuca arundinacea*. A number of very small, narrow patches of understorey vegetation supporting a non-dominant component of native grasses such as Red-leg Grass *Bothriochloa macra*, and Wallaby Grasses *Rytidosperma spp*. exist in the south-west of the study area (Attachment A, Section 2.2, Page 5 - 7).

A number of small patches of riparian/floodplain vegetation exist throughout the study area. These patches are concentrated in those areas bordering Jerrabomberra Creek and surrounding floodplain paleochannels and first order streams in the Dairy Flat and Kellys Swamp areas (Attachment A, Figure 5). Patches of riparian vegetation are primarily characterised by heavily grazed exotic perennial vegetation and exotic trees including Crack Willow *Salix fragilis* and Elm *Ulmus spp*. (Attachment A, Section 2.2, Page 5 - 7). Some sparse to moderately dense native fringing vegetation exists within the study area, primarily concentrated along of Jerrabomberra Creek and associated paleochannels (Attachment A, Figure 3a – Figure 3g, Page 29 - 35).

A number of patches of planted local and non-local native trees and shrubs exist within the study area south of Dairy Flat, with the most extensive patches being those associated with public use areas (e.g. foot/bicycle trails, birdwatching areas) within the Jerrabomberra Wetlands Nature Reserve (Attachment A, Figure 4a, Figure 4d –

Figure 4g).

Plant Community Type(s)

Although little remnant native vegetation exists within the study area, a variety of factors indicate that the climax (i.e. pre-1750) ecological community applicable to the study area would have been ACT Plant Community Type (PCT) '*ACT04 – Tablelands Wet Tussock Grassland'*. These factors include:

- historic written descriptions of the area (Jerrabomberra Wetlands Nature Reserve Board of Management, 2013);
- the history of the area as a lowland floodplain;
- extant landscape features (i.e. paleochannels, perennial rivers and creeks);
- the low position of the landscape compared to the surrounding hills and slopes; and
- lack of any evidence of naturally-occurring native overstorey vegetation existing within the study area or surrounds (i.e. large tree stumps, old fallen woody debris etc.).

Threatened Flora

No EPBC Act and/or Nature Conservation Act 2014 (NC Act) listed threatened flora species were recorded in the study area during the field surveys, nor have any been previously recorded in the study area (as indicated by previous ecological studies, ACTmapi, NSW Bionet, and NatureMapr). Given the extensive history of intense disturbance of vegetation and soil within the study area, no threatened flora species with the potential to occur in the locality are considered to have a moderate or higher likelihood of occurrence in the study area.

Native Fauna Recorded

As detailed in Appendix B of Attachment A, one native mammal species, three native amphibian species, and 50 native bird species were recorded during field surveys. No threatened fauna species listed pursuant to the EPBC Act and/or NC Act were recorded, with most of the species recorded relatively common urban-adapted species, or common wetland/riparian ecosystem specialist species.

Native Fauna Habitat

The study area supports the following fauna habitat features.

- The nectar and seed from Eucalypts, River Sheoak, Wattles, and Paperbark planted within the study area, and the fruit of the small number of exotic shrubs and scramblers, such as African Boxthorn and Blackberry, recorded within the study area may provide a foraging resource for numerous common bird species, and potentially a transitory foraging resource for some threatened bird species.
- The study area supports a sparse to dense understorey dominated by exotic annual and perennial pasture grasses. Such areas are unlikely to be of value to threatened fauna species but may be used by common native fauna (e.g. birds, kangaroos, wombats, reptiles, arthropods).
- Riparian areas, including Jerrabomberra Creek and several floodplain paleochannels are present throughout the study area. Those few riparian areas incorporating dense, fringing native vegetation provide foraging, movement, and breeding habitat to many native bird species. These areas are likely to provide movement and foraging habitat to threatened migratory shorebirds known to visit the locality.
- With the exception of migratory shorebirds, the study area is unlikely to provide habitat, beyond transitory movement habitat, for any EPBC Act listed migratory birds.

Exotic Fauna

Common Starling *Sturnus vulgaris,* European Blackbird *Turdus merula*, Rock Dove *Columba livia*, and European Rabbit *Oryctolagus cuniculus* were recorded in the study area during the field surveys. Additionally, the exotic pest species, Red Fox *Vulpes vulpes*, Domestic Cat *Felis catus*, and Common Myna *Acridotheres tristis*, are known or considered likely to occur in the study area and surrounds. Each of these species is commonly encountered in such peri-urban sites.

Exotic Flora

Sixty-seven (67) exotic plant species were recorded in the study area. Whilst the majority of these are common weeds across urban land throughout the region, sixteen recorded exotic plant species are listed as Commonwealth Weeds of National Significance (WoNS) and/or as declared pest plant species in the ACT.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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

As described in Section 3.2.1, a comprehensive Ecological Impact Assessment was undertaken by Capital Ecology in 2024, provided as Attachment A. General descriptions of the vegetation observed within the study area assessed by Capital Ecology are provided below.

General Vegetation Condition

Following extensive historic and recent vegetation disturbance and modification, the study area is largely characterised by a groundstorey dominated by exotic annual and perennial grasses such as Phalaris *Phalaris aquatica*, Paspalum *Paspalum dilatatum*, and Tall Fescue *Festuca arundinacea*. A number of very small, narrow patches of understorey vegetation supporting a non-dominant component of native grasses such as Red-leg Grass *Bothriochloa macra*, and Wallaby Grasses *Rytidosperma spp*. exist in the south-west of the study area (Attachment A, Section 2.2, Page 5 - 7).

A number of small patches of riparian/floodplain vegetation exist throughout the study area (Attachment A, Section 2.2, Page 5 - 7). These patches are concentrated in those areas bordering Jerrabomberra Creek and surrounding floodplain paleochannels and first order streams in the Dairy Flat and Kellys Swamp areas (Attachment A, Figure 5, Page 43). Patches of riparian vegetation are primarily characterised by heavily grazed exotic perennial vegetation and exotic trees including Crack Willow *Salix fragilis* and Elm *Ulmus spp*. Some sparse to moderately dense native fringing vegetation exists within the study area, primarily concentrated along of Jerrabomberra Creek and associated paleochannels (Attachment A, Figure 3a – Figure 3g, Page 29 - 35).

A number of patches of planted local and non-local native trees and shrubs exist within the study area south of Dairy Flat, with the most extensive patches being those associated with public use areas (e.g. foot/bicycle trails, birdwatching areas) within the JWNR (Attachment A, Figure 4a, Figure 4d – Figure 4g).

Threatened Ecological Communities

Based on the location of the study area, two EPBC Act listed threatened ecological communities (TECs) are initially considered as having the potential to occur in the study area, both listed as critically endangered ecological communities pursuant to the EPBC Act: ‘Natural Temperate Grassland of the South Eastern Highlands’ (NTG-SEH), and ‘White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland’ (Box-Gum Woodland). However, based on the landscape position and other factors discussed in Section 3.2.1 of this referral, only EPBC Act NTG-SEH is considered to have the potential to occur within the study area.

Whilst the study area is likely to have once supported EPBC Act NTG-SEH, it now is clearly dominated by exotic pasture species and weeds and lacks the required floristic diversity. Assessed against the minimum condition thresholds for EPBC listed NTG-SEH (see Attachment A, Section 2.3.1, Table 4, Page 9), no vegetation in the study area meets the definition of NTG-SEH under the EPBC Act.

Native Vegetation

Per the NC Act definition, the study area supports 1.83 ha of native vegetation (comprised of riparian fringing vegetation and planted upper/middle stratum vegetation). The proposed action will directly impact 0.20 ha of native vegetation, as defined under the NC Act.

Soils/geology

The Jerrabomberra Wetlands occupy 174 hectares of land at an altitude of 555–563 m. Most of the wetlands are formed on an alluvial terrace of the Molonglo River as a result of flooding after construction of Lake Burley Griffin. Traces of former river channels and levee banks are visible on the surface of the floodplain. These are connected on their western ends by a dredged channel. A small, elevated area exists in the south-west corner of the reserve. Part of this area was previously used as a landfill and has subsequently been remediated and revegetated to form part of the reserve’s public access area. Soils in the floodplain component of the reserve are clay-dominant,

formed from alluvial material deposited by the Molonglo River and Jerrabomberra Creek. A large quantity of building spoil has been introduced along the south-western edge of the reserve to enable the development of a dry eucalypt habitat. This material consists of a mix of topsoil, subsoil, boulders and building materials.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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 within the proposed action area.

The proposed action area is in the ACT, which has a number of Commonwealth heritage properties, given its proximity to the Parliamentary Triangle. The proposed action is within 500m of Lake Burley Griffin and Adjacent Lands Commonwealth Heritage site, and the proposed action will not result in any hydrological changes to Lake Burley Griffin or any of its tributaries. The distance from the proposed action area to the Commonwealth Heritage site is such that there would be no direct or indirect impacts to Lake Burley Griffin and the proposed action will not impact any known Commonwealth heritage properties

Two sites within the study area have been listed on the ACT Heritage Register under the *ACT Heritage Act 2004*, which are the Jerrabomberra Wetlands (including palaeochannels within the Jerrabomberra Wetlands) and the City Remnants. The proposed works are not expected to diminish the significance of these registered heritage places as all trenches will be remediated and the ground level restored.

The project will not impact upon any Commonwealth heritage places overseas.

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

Two surveys were undertaken by Navin Officer Heritage Consultants (NOHC) staff and indigenous stakeholders on 15 July 2022, 7 August 2023, and 20 October 2023, respectively.

Indigenous heritage values applicable to the project area are detailed in Attachment D (Section 6, Page 34 - 39). The proposed alignment has been redesigned to avoid impacts to all known aboriginal sites identified on site.

Note: Attachment D is not to be made publicly available due to inclusion of maps, GPS locations, and photographs of indigenous heritage sites.

3.4 Hydrology

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

The proposed action area falls within both the Molonglo River catchment and the Jerrabomberra Creek Catchment.

The proposed action area is located within Jerrabomberra wetlands which are an important local area for bird habitat within the ACT, formed during the creation of Lake Burley Griffin. The proposed alignment crosses over the Jerrabomberra Creek, which is in a highly modified state.

Jerrabomberra Creek is a tributary of the Molonglo with a catchment of around 128 square metres. The lower reaches of the creek are considered to be a permanent stream. Some detailed survey of the lower Jerrabomberra in the early twentieth century, changes in the natural course of the creek demonstrate an active valley floor environment subject to high energy flows during flood. The proposed alignment will not reduce or alter surface water flows in the Jerrabomberra Creek or Wetlands and will not involve the removal of any lowland streams with aquatic habitat. Appropriate stormwater measures will be implemented to ensure no hydrological impacts to the Jerrabomberra Wetlands.

The proposed works are not expected to diminish the significance of the Jerrabomberra Wetlands as all trenches will be remediated and the ground level restored.

The Jerrabomberra Creek and the Causeway (to the southwest) are two projects completed under the ACT Government's healthy Waterways Project, which aimed to improve water quality within the Jerrabomberra Wetlands and Lake Burley Griffin.

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	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
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 listed World Heritage properties within the proposed disturbance footprint. No direct or indirect impacts to World Heritage properties are expected 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 listed National Heritage properties within the proposed disturbance footprint. No direct or indirect impacts to World Heritage properties are expected as a result of the proposed action.

Four National Heritage places are within the 10 km Protected Matters Search Tool search for the proposed project area:

- High Court - National Gallery Precinct
- Old Parliament House
- Australian Academy of Science Building
- Australian War Memorial and the Memorial Parade

Given the nature of the proposed action and the distance to these National Heritage places, it is not expected that the proposed action will result in any direct or indirect impacts.

4.1.3 Ramsar Wetland

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

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

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

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Hattah-Kulkyne Lakes
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

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. *

The proposed action is not situated in or near a Ramsar Wetland. The nearest Ramsar Wetland, Hattah-kulkyne lakes, is approximately 600 - 700 km upstream of the project area.

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	Anthochaera phrygia	Regent Honeyeater
No	Yes	Aphelocephala leucopsis	Southern Whiteface
No	No	Aprasia parapulchella	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard
No	No	Botaurus poiciloptilus	Australasian Bittern
Yes	Yes	Calidris acuminata	Sharp-tailed Sandpiper
Yes	Yes	Calidris ferruginea	Curlew Sandpiper
No	Yes	Callocephalon fimbriatum	Gang-gang Cockatoo
No	No	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo
No	No	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat
No	No	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)
No	No	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)
No	No	Delma impar	Striped Legless Lizard, Striped Snake-lizard
No	No	Dodonaea procumbens	Trailing Hop-bush
No	No	Eucalyptus aggregata	Black Gum
No	No	Falco hypoleucos	Grey Falcon
Yes	Yes	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Grantiella picta	Painted Honeyeater
No	No	Hirundapus caudacutus	White-throated Needletail

Direct impact	Indirect impact	Species	Common name
No	No	Lathamus discolor	Swift Parrot
No	No	Lepidium aschersonii	Spiny Peppercress
No	No	Lepidium ginninderrense	Ginninderra Peppercress
No	No	Lepidium hyssopifolium	Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed
No	No	Leucochrysum albicans subsp. tricolor	Hoary Sunray, Grassland Paper-daisy
Yes	Yes	Limosa lapponica baueri	Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit
No	No	Litoria aurea	Green and Golden Bell Frog
No	No	Litoria castanea	Yellow-spotted Tree Frog, Yellow-spotted Bell Frog
No	No	Litoria raniformis	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog
No	No	Maccullochella macquariensis	Trout Cod
No	No	Maccullochella peelii	Murray Cod
No	No	Macquaria australasica	Macquarie Perch
No	No	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	Neophema chrysostoma	Blue-winged Parrot
No	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	Yes	Polytelis swainsonii	Superb Parrot
No	No	Pomaderris pallida	Pale Pomaderris
No	No	Prasophyllum petilum	Tarengo Leek Orchid
No	No	Pteropus poliocephalus	Grey-headed Flying-fox
Yes	Yes	Rostratula australis	Australian Painted Snipe
No	No	Rutidosis leptorhynchoides	Button Wrinklewort
No	No	Senecio macrocarpus	Large-fruit Fireweed, Large-fruit Groundsel
No	Yes	Stagonopleura guttata	Diamond Firetail

Direct impact	Indirect impact	Species	Common name
No	No	Swainsona recta	Small Purple-pea, Mountain Swainson-pea, Small Purple Pea
No	No	Synemon plana	Golden Sun Moth
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Tympanocryptis lineata	Canberra Grassland Earless Dragon, Lined Earless Dragon

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Natural Temperate Grassland of the South Eastern Highlands
No	No	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

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

Yes

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

Justification for exclusion of threatened species and threatened ecological communities

Threatened flora

As detailed in Attachment A (Section 2.5, Page 10), no flora species listed as threatened pursuant to the EPBC Act and/or NC Act were detected within the project area during ecological surveys. Additionally, as detailed in Attachment A (Section 2.5, Page 10), given the extensive history of intense disturbance of vegetation and soil within the study area, no threatened flora species with the potential to occur in the locality are considered to have a moderate or higher likelihood of occurrence in the study area.

Threatened fauna

As detailed in Attachment A (Section 2.7.1, Page 11), no fauna species listed as threatened pursuant to the EPBC Act and/or NC Act were detected within the project area during ecological surveys.

Through the likelihood of occurrence assessment process detailed in Attachment A (Appendix D, Page 58), it was determined that the following species have a moderate or higher likelihood of occurring within the project area on a migratory and/or transitory basis.

- Diamond Firetail *Stagonopleura guttata*
- Southern Whiteface *Aphelocephala leucopsis*
- Gang-gang Cockatoo *Callocephalon fimbriatum*
- Superb Parrot *Polytelis swainsonii*
- Australian Painted-snipe *Rostratula australis*
- Curlew Sandpiper *Calidris ferruginea*

- Latham's Snipe *Gallinago hardwickii*
- Nunivak Bar-tailed godwit *Limosa lapponica baueri*
- Sharp-tailed Sandpiper *Calidris acuminata*

All other threatened fauna species assessed were determined to have a low or nil likelihood of occurring within the project area.

Threatened ecological communities

Two EPBC Act listed TECs are initially considered as having the potential to occur in the study area, both listed as critically endangered ecological communities pursuant to the EPBC Act: 'Natural Temperate Grassland of the South Eastern Highlands' (NTG-SEH), and 'White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland' (Box-Gum Woodland). However, based on the landscape position and other factors discussed in Attachment A (Section 2.2, Page 5 - 7), only EPBC Act NTG-SEH is considered to have the potential to occur within the study area.

To determine whether a patch meets the criteria for the community, the vegetation must be assessed against the criteria provided in the Approved Conservation Advice for the Natural Temperate Grassland of the South Eastern Highlands (Commonwealth of Australia, 2016). An assessment of the vegetation within the study area mapped as *ACT04 – Tablelands Wet Tussock Grassland* is provided in Attachment A (Section 2.3.1, Table 4, Page 9). As per Attachment A (Section 2.3.1, Table 4, Page 9), it is determined that the project area does not support EPBC Act listed NTG-SEH.

Threatened migratory shorebird species

Riparian areas within the study area, including Jerrabomberra Creek, wetland areas, paleochannels, and associated riparian fringing vegetation provide foraging, movement, and breeding habitat to many native bird species, including a number of migratory shorebirds listed as threatened pursuant to the EPBC Act, as identified in Section 4.1.4.1 of this referral. Of these species, Latham's Snipe is known to most reliably occur within the ACT in small numbers (recorded in 97% of survey years from 1974 – 2014, with ten or more birds recorded at Jerrabomberra Wetlands Nature Reserve on 12 occasions). A record 146 individuals were recorded at the Jerrabomberra Wetlands Nature Reserve in September 2023.

Sharp-tailed Sandpiper is known to often occur in the ACT in small numbers (recorded in 79% of survey years from 1974 – 2014, with ten or more records occurring each year from 2002 – 2014 and approximately 78% of observations being within Jerrabomberra Wetlands Nature Reserve) (ACT Government, 2018).

The remaining threatened migratory shorebird species identified as potentially being directly/indirectly impacted by the proposed action are considered uncommon to vagrant in the ACT, generally recorded in small numbers and in <10% of survey years from 1974 - 2014.

A substantial proportion of threatened migratory bird records within the ACT are located within, or near, the Jerrabomberra Wetlands Nature Reserve (ACT Government, 2018).

Latham's Snipe

Although generally widely dispersed, Latham's Snipe principally breeds and migrates as a single population. As such, per the EPBC Act definition (DCCEEW, 2013), the project area supports foraging and roosting habitat for a small proportion of an important population of Latham's Snipe. With reference to the species' conservation advice (DCCEEW, 2024), Jerrabomberra Wetlands Nature Reserve (within which a substantial portion of the project area is contained) is considered habitat critical to the survival of Latham's Snipe as this area has been known to reliably support at least 18 individuals of the species during migration, with records of up to 146 birds occurring in the area (Latham's Snipe Project, 2023).

Sharp-tailed Sandpiper

Although widely dispersed, Sharp-tailed Sandpiper generally migrates as a single population, with approximately 91% of the EAA Flyway population occurring in Australia/New Zealand (ACT Government, 2018). As such, per the EPBC Act definition (DCCEEW, 2013), the project area supports foraging and roosting habitat for a very small proportion of an important population of Sharp-tailed Sandpiper. With reference to the species' conservation

advice (DCCEEW, 2024), Jerrabomberra Wetlands Nature Reserve (within which a substantial portion of the project area is contained) would not be considered habitat critical to the survival of Sharp-tailed Sandpiper as this area is unlikely to reliably support at least 85 individuals of the species (ACT Government, 2018).

Australian Painted-snipe, Curlew Sandpiper, Nunivak Bar-tailed Godwit

Australian Painted-snipe, Curlew Sandpiper, and Nunivak Bar-tailed Godwit are listed as either endangered or critically endangered pursuant to the EPBC Act. As such, it is not necessary to undertake an important population assessment for these species. Given the paucity of records and absence of known breeding habitat in the locality, the project area is not considered to support habitat critical to the survival of these species.

Direct/Indirect impact assessment

It is considered that the proposed action, without the incorporation of appropriate avoidance/mitigation measures, is likely to have a direct/indirect on impact on one or more of the above migratory shorebird species (including important populations where applicable) through temporary impacts to approximately 1.74 ha* of combined roosting and foraging habitat (see Attachment A, Figure 7, Page 47) during works (e.g. trenching, infill of trenching, construction of temporary tracks etc.).

If the proposed action was to be undertaken without incorporating appropriate avoidance or mitigation measures (such as adjusted timing of works, revegetation etc.), there is potential that vegetation clearance, noise, vibrations and other sources of disturbance could render nearby areas of roosting/foraging habitat temporarily uninhabitable for these often shy and disturbance sensitive migratory shorebird species during construction activities.

Without the incorporation of appropriate mitigation measures (e.g. sedimentation controls, biosecurity controls etc.) discussed in Section 4.1.4.10 of this referral, edge effects on adjacent habitat areas through processes such as sedimentation, contamination, and spread of weeds resulting in an indirect impact to one or more protected matters is likely.

Woodland bird species

Although no threatened fauna species were recorded during ecological surveys undertaken within the project area on 8 August 2023, 8 November 2023, and 10 May 2024 (refer to Appendix A, Introduction, Page 2), planted native vegetation and exotic vegetation within the project area has the potential to support transitory foraging and movement habitat for a number of threatened bird species, including:

- Diamond Firetail *Stagonopleura guttata*
- Southern Whiteface *Aphelocephala leucopsis*
- Gang-gang Cockatoo *Callocephalon fimbriatum*
- Superb Parrot *Polytelis swainsonii*

Per the EPBC Act definition (DCCEEW, 2013), and with consideration of the transitory nature of potential habitat within the project area for each of the above species, the project area is not considered to support an important population of any of the above woodland bird species.

Indirect impact assessment

The proposed action has the potential to indirectly impact the above species known to occasionally visit the Jerrabomberra Wetlands Nature Reserve and surrounding areas. Indirect impacts on the above species would likely include disturbance through a higher than normal level of human activity, elevated noise levels during construction, potential for increased light pollution, and potential incursions of pest plants during construction activities. There is no habitat critical to the survival of the above species within the project area, and no direct impacts to these species as a result of the proposed action are anticipated.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

*Area based on known foraging/roosting habitat area of Latham's Snipe within project area.

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

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

It is considered that the proposed action would constitute a Significant Impact for Latham's Snipe, for which the Jerrabomberra Wetlands Nature Reserve is considered habitat critical to the species' survival (as determined in Section 4.1.4.2 of this referral).

With reference to the EPBC Act Significant Impact Guidelines 1.1 (DCCEEW, 2013), without the incorporation of the appropriate avoidance and mitigation measures, and depending on a number of other factors such as actual timing of the proposed action, the proposed action *may*:

- disrupt the breeding cycle of an important population of Latham's Snipe and/or;
- adversely affect habitat critical to the survival of Latham's Snipe.

As described in Section 4.1.4.2 of this referral, a number of threatened migratory shorebird species, including Latham's Snipe, travel a substantial distance from breeding grounds in the northern hemisphere to utilize the Jerrabomberra Wetlands Nature Reserve for foraging/roosting through the Spring/Summer migratory period, expending a large amount of energy to do so.

As such, substantial disturbance of the Latham's Snipe and its habitat during this time *may* constitute a significant impact on this species. However, should the proposed works be undertaken outside of the migratory period for these species and timing of the proposed works is as such that it enables vegetation cover to recover to a point where it provides sufficient cover by the start of the following migratory period, it is unlikely that the proposed action would materially disrupt the breeding cycle for Latham’s Snipe or any other threatened migratory shorebird species, adversely affect habitat critical to the survival of Latham’s Snipe or any other threatened migratory shorebird species, or result in any other impact referenced in the EPBC Act Significant Impact Guidelines 1.1 (DCCEEW, 2013) for Latham’s Snipe or any other threatened migratory shorebird species.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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. *

Regarding direct impacts on migratory shorebird species listed as threatened pursuant to the EPBC Act that are known to utilise the Jerrabomberra Wetlands Nature Reserve and surrounding areas, namely Latham's Snipe, the following measures will be incorporated into the proposed action to ensure that:

- Direct impacts to these species are **avoided** through ensuring no works are undertaken in proximity to indicative roosting areas or indicative foraging habitat for these species during the migratory period (1 August – 31 March inclusive); and
- Indirect impacts to these species are **mitigated** through limiting the clearing of vegetation and other associated groundworks and machinery movements as far as practicable within and around riparian areas supporting native fringing vegetation with the objective of maximising the retention of suitable foraging and movement habitat for threatened migratory shorebirds. Key riparian vegetation is avoided further through underboring areas supporting dense riparian cover (e.g. Jerrabomberra Creek), rather than directly impacting these areas. As soon as practicable following construction, any area within which vegetation disturbance occurred to facilitate the proposed action is to be reinstated to the same or similar condition to that it was in prior to undertaking the proposed action (refer to Appendix A, Section 2.2, Page 5 - 7 and Figure 3a - 3g, Page 29 - 35).

Provided that the proposed action is undertaken in a particular manner (through the incorporation of the above avoidance and mitigation measures [discussed further in Section 4.1.4.10 of this referral]), significant impacts to Latham's Snipe and/or any other migratory shorebird species listed as threatened pursuant to the EPBC act would be unlikely and the proposed action would not be considered a controlled action under Part 3, Division 1, Subdivision C of the EPBC Act.

As discussed further in Attachment A (Section 2.2, Page 5 - 7), the disturbance footprint is largely dominated by highly degraded, exotic and/or planted native vegetation. While the proposed action will have some short term impact on a small amount of low quality native vegetation within the Jerrabomberra Wetlands Nature Reserve (0.20 ha), these areas by themselves are not considered to align with any matters of NES, and regardless, will be revegetated appropriately as soon as practicable following construction works.

Additionally, it should be noted that the selection of the proposed development site and cable routes has been the subject of a highly detailed assessment over multiple decades. While, as discussed above, the proposed action may have some localised impacts during the construction and demolition phases, these impacts will largely be confined to these phases as the proposed action does not seek to change the current land use or management regimes within the disturbance footprint.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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. *

With regard to migratory shorebirds, namely Australian Painted Snipe, the EPBC Act notice of decision applicable to a previous iteration of the proposed action (Commonwealth of Australia, 2009) states that to avoid disruption to the lifecycle of an ecologically significant proportion of the population of a migratory species, "*construction or removal works within the Jerrabomberra Wetlands Nature Reserve associated with the action must not occur between 1 October and 31 March inclusive*".

It should be noted that of the species listed in Section 4.1.4.1 of this referral, Latham's Snipe occurs most reliably within the Jerrabomberra Wetlands Nature Reserve during the migratory period, with the remaining species, including Australian Painted Snipe, usually occurring in limited numbers and considered generally uncommon, rare, or vagrant at the Jerrabomberra Wetlands Nature Reserve and wider locality (ACT Government, 2018). Additionally, as noted in Section 4.1.5.2 of this referral, it is considered that the project area and wider Jerrabomberra Wetlands Nature Reserve meet the definition of nationally important habitat for Latham's Snipe.

Following advice received on 29 February 2024 by Lori Gould, a local researcher specialising in Latham's Snipe, to the minimise risk of disturbance to this sensitive species during its migration, the following additional restrictions/considerations should be placed on the timing of works within Jerrabomberra Wetlands Nature Reserve:

- No works are to be undertaken within or in proximity to indicative roosting areas or indicative foraging habitat (see Attachment A, Figure 7, Page 47) between 1 August and 31 March inclusive.

In addition to the above, construction works undertaken outside of 1 August to 31 March, including clearing of vegetation and other associated groundworks and machinery movements, will be limited as far as practicable within and around riparian areas supporting native fringing vegetation with the objective of maximising the retention of suitable foraging and movement habitat for migratory shorebirds.

As soon as practicable following construction, any area within which vegetation disturbance occurred to facilitate the proposed action should be reinstated to the same or similar condition to that it was in prior to undertaking the proposed action (see Attachment A, Section 2.2, Page 5 - 7 and Figure 3a - 3g, Page 29 - 35).

Additional avoidance and mitigation measures such as sediment monitoring and erosion control (see Attachment F, Section 7, Page 20 and Appendix I, Page 45) noise and vibration monitoring and control (see Attachment F, Appendix D, Page 32), contamination management (See Attachment G, Section 2 - 4, Page 3 - 9), and biosecurity processes (See Attachment F, Section 6, Page 15) are to be implemented to further minimise the likelihood of direct and/or indirect impacts on protected matters.

Note 1: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

Note 2: Attachment F is not to be made publicly available due to inclusion of maps, GPS locations, and photographs of indigenous heritage sites.

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

No offsets are proposed. All direct impacts potentially constituting a ‘significant impact’ on MNES are expected to be effectively mitigated through the measures described in Section 4.1.4.10 of this referral.

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
Yes	Yes	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
Yes	Yes	Calidris acuminata	Sharp-tailed Sandpiper
Yes	Yes	Calidris ferruginea	Curlew Sandpiper
Yes	Yes	Calidris melanotos	Pectoral Sandpiper
Yes	Yes	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Hirundapus caudacutus	White-throated Needletail
Yes	Yes	Limosa lapponica	Bar-tailed Godwit
No	No	Monarcha melanopsis	Black-faced Monarch
No	No	Motacilla flava	Yellow Wagtail
No	No	Myiagra cyanoleuca	Satin Flycatcher
No	No	Pandion haliaetus	Osprey

Direct impact	Indirect impact	Species	Common name
No	No	Rhipidura rufifrons	Rufous Fantail

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

Yes

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

Riparian areas within the project area, including Jerrabomberra Creek, wetland areas, paleochannels, and associated riparian fringing vegetation provide foraging, movement, and breeding habitat to many native bird species, including a number of shorebird species listed as migratory pursuant to the EPBC Act, as identified in Section 4.1.4.1 of this referral, known to visit the Jerrabomberra Wetlands Nature Reserve and surrounding locality on a seasonal basis.

As the Jerrabomberra Wetlands Nature Reserve is known to support a number of migratory shorebird species, targeted surveys are not considered necessary to confirm presence for the purpose of this referral. Additionally, due to fluctuations in population numbers and paucity of records for many migratory shorebird species in the locality, targeted survey over a single season would not be considered a reliable measure of species presence/absence within the project area. A comprehensive list of fauna species observed within the study area during surveys between 11 August 2023 and 27 August 2024 is provided within Attachment A (Appendix B, Page 52).

It is considered that the proposed action, without the incorporation of appropriate avoidance/mitigation measures, is likely to have a direct/indirect on impact on one or more of the following migratory shorebird species through clearance of approximately 1.74 ha* of combined roosting and foraging habitat (see Attachment A, Figure 7, Page 47) during works (e.g. trenching, construction of temporary tracks etc.).

Bar-tailed Godwit *Limosa lapponica* (Non-breeding vagrant [ACT Government, 2018])

The Bar-tailed Godwit is a non-breeding vagrant to the ACT. Within the ACT, the species is rarely recorded, and when observed, is generally recorded as a single bird or a small group (< 5 individuals) utilising limited shallow water habitats in proximity to the margins of lakes and wetlands, including the Jerrabomberra Wetlands Nature Reserve. As the project area does not regularly support this species, and has not been known to support to support >0.1% of the species' East Asian - Australasian Flyway (EAAF) population at any time (DCCEEW, 2024), the project area is not considered internationally important habitat or nationally important habitat for the Bar-tailed Godwit.

Common Sandpiper *Actitis hypoleucos* (Rare, non-breeding summer migrant [ACT Government, 2018])

The Common Sandpiper is a rare, non-breeding summer migrant to the ACT. Within the ACT, the species is rarely recorded, and when observed, is generally recorded as a single bird or a small group (< 5 individuals) utilising riparian habitats and lake margins. As the project area does not regularly support this species, and has not been known to support >0.1% of the species' EAAF population at any time, the project area is not considered internationally important habitat or nationally important habitat for the Common Sandpiper.

Latham's Snipe *Gallinago hardwickii* (Common, non-breeding summer migrant [ACT Government, 2018])

The Latham's Snipe is a common, non-breeding summer migrant to the ACT. This species is known to reliably occur within the ACT in small numbers (recorded in 97% of survey years from 1974 – 2014, with ten or more birds recorded at Jerrabomberra Wetlands Nature Reserve on 12 occasions). A record 146 individuals were recorded at Jerrabomberra Wetlands Nature Reserve in September 2022 (Latham's Snipe Project, 2023). With reference to

the species' conservation advice (DCCEEW, 2024), Jerrabomberra Wetlands Nature Reserve (within which a substantial portion of the project area is contained) is considered nationally important habitat for Latham's Snipe as this area is known to reliably support at least 18 individuals of the species during migration.

Pectoral Sandpiper *Calidris melanotos* (Non-breeding vagrant [ACT Government, 2018])

The Pectoral Sandpiper is a non-breeding vagrant to the ACT. Within the ACT, the species is rarely recorded, and when observed, is generally recorded as a single bird or a small group (< 5 individuals) in a mixed flock with other shorebird species foraging in shallow water or soft mud at the edge of wetlands. As the project area does not regularly support this species, and has not been known to support >0.1% of the species' EAAF population at any time, the project area is not considered internationally important habitat or nationally important habitat for the Pectoral Sandpiper.

Curlew Sandpiper *Calidris ferruginea* (Non-breeding vagrant [ACT Government, 2018])

The Curlew Sandpiper is a non-breeding vagrant to the ACT. Within the ACT, the species is rarely recorded, and when observed, is generally recorded as a single bird or a small group (< 5 individuals), with a single record of the species occurring in a group of up to eight birds at Jerrabomberra Wetlands Nature Reserve in 1978. As the project area does not regularly support this species, and has not been known to support >0.1% of the species' EAAF population at any time, the project area is not considered internationally important habitat or nationally important habitat for the Curlew Sandpiper.

Sharp-tailed Sandpiper *Calidris acuminata* (Uncommon, non-breeding vagrant [ACT Government, 2018])

The Sharp-tailed Sandpiper is an uncommon, non-breeding vagrant to the ACT. This species is the second most regularly occurring shorebird in the ACT (with the most regularly occurring shorebird species being Latham's Snipe), generally recorded as a single bird or a small group (< 5 individuals), primarily within or in proximity to the Jerrabomberra Wetlands Nature Reserve. This species is occasionally observed in larger feeding groups nearby, however, with a group of 28 birds recorded in proximity to the Fyshwick Sewage Ponds in 2014. Although the project area and wider Jerrabomberra Wetlands Nature Reserve are known to regularly support small numbers of this species during migration, as the project area has not been known to reliably support >0.1% of the species' EAAF population at any time, the project area is not considered internationally important habitat or nationally important habitat for the Sharp-tailed Sandpiper.

As many migratory shorebirds travel a substantial distance from breeding grounds in Siberia, Northern Japan, and China to utilize the Jerrabomberra Wetlands Nature Reserve through the Spring/Summer migratory period, expending a large amount of energy to do so, substantial disturbance of the birds and their habitat during this time may constitute a direct and/or indirect impact on one or more species of migratory shorebird, as outlined below.

If the proposed action was to be undertaken without incorporating appropriate avoidance or mitigation measures (such as adjusted timing of works, revegetation etc.), there is potential that noise, vibrations and other sources of disturbance could render nearby areas of roosting/foraging habitat temporarily uninhabitable for these often shy and disturbance sensitive species during construction activities, with Latham's Snipe being of most concern due to the status of the Jerrabomberra Wetlands Nature Reserve as nationally important habitat for the species.

Without the incorporation of additional mitigation measures (e.g. sedimentation controls, biosecurity controls etc.) discussed in Section 4.1.4.10 of this referral, edge effects on adjacent habitat areas through processes such as sedimentation, contamination, and spread of weeds resulting in an indirect impact to one or more protected matters is likely.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

*Area based on known foraging/roosting habitat area of Latham's Snipe within project area.

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

Yes

4.1.5.5 Describe why you consider this to be a Significant Impact. *

With reference to the EPBC Act Significant Impact Guidelines 1.1 (DCCEEW, 2013), without the incorporation of the appropriate avoidance and mitigation measures, and depending on a number of other factors such as actual timing of the proposed action, the proposed action *may*:

- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species and/or
- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species

As described in Section 4.1.4.2 of this referral, many migratory shorebirds (identified in Section 4.1.4.1 of this referral) travel a substantial distance from breeding grounds in Siberia, Northern Japan, and China to utilize the Jerrabomberra Wetlands Nature Reserve for foraging/roosting through the Spring/Summer migratory period, expending a large amount of energy to do so.

As parts of the project area are considered nationally important habitat for Latham's Snipe (refer to Section 4.1.5.2 of this referral), substantial disturbance of the birds and their habitat during this time *may* constitute a significant impact on this species. However, should the proposed works be undertaken outside of the migratory period for this species (as described in Section 4.5.10 of this referral), it is unlikely that the proposed action would materially disrupt the breeding cycle for Latham's Snipe or any other species of migratory shorebird identified in Section 4.1.5.2 of this referral, nor result in any other impact referenced in the EPBC Act Significant Impact Guidelines 1.1 (DCCEEW, 2013) for Latham’s Snipe or any other shorebird species listed as Migratory pursuant to the EPBC Act.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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

No

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

Regarding direct impacts on shorebird species listed as migratory pursuant to the EPBC Act that are known to utilise the Jerrabomberra Wetlands Nature Reserve and surrounding areas, namely Latham’s Snipe, the following measures will be incorporated into the proposed action to ensure that:

- Direct impacts to these species are **avoided** through ensuring no works are undertaken in proximity to indicative roosting areas or indicative foraging habitat for these species during the migratory period (1 August – 31 March inclusive); and
- Indirect impacts to these species are **mitigated** through limiting the clearing of vegetation and other associated groundworks and machinery movements as far as practicable within and around riparian areas supporting native fringing vegetation with the objective of maximising the retention of suitable foraging and movement habitat for migratory shorebirds. Key riparian vegetation is avoided further through underboring areas supporting dense riparian cover (e.g. Jerrabomberra Creek), rather than directly impacting these areas. As soon as practicable following construction, any area within which vegetation disturbance occurred to facilitate the proposed action should be reinstated to the same or similar condition to that it was in prior to undertaking the proposed action (refer to Appendix A, Section 2.2, Page 5 - 7 and Figure 3a - 3g, Page 29 - 35).

Provided that the proposed action is undertaken in a particular manner (through the incorporation of the above avoidance and mitigation measures [discussed further in Section 4.1.4.10 of this referral]), significant impacts to Latham’s Snipe and any other shorebird species listed as migratory pursuant to the EPBC act would be unlikely and the proposed action would not be considered a controlled action under Part 3, Division 1, Subdivision D of the EPBC Act.

As discussed further in Attachment A (Section 2.2, Page 5 - 7), the disturbance footprint is largely dominated by highly degraded, exotic and/or planted native vegetation. While the proposed action will have some short term impact on a small amount of low quality native vegetation within the Jerrabomberra Wetlands Nature Reserve (0.20 ha), these areas by themselves are not considered to align with any mattes of NES, and regardless, will be revegetated appropriately following construction works.

Additionally, it should be noted that the selection of the proposed development site and cable routes has been the subject of a highly detailed assessment over multiple decades. While, as discussed above, the proposed action may have some localised impacts during the construction and demolition phases, these impacts will largely be confined to these phases as the proposed action does not seek to change the current land use or management regimes within the disturbance footprint.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

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

With regard to migratory shorebirds, namely Australian Painted Snipe, the EPBC Act notice of decision applicable to a previous iteration of the proposed action (Commonwealth of Australia, 2009) states that to avoid disruption to the lifecycle of an ecologically significant proportion of the population of a migratory species, "*construction or removal works within the Jerrabomberra Wetlands Nature Reserve associated with the action must not occur between 1 October and 31 March inclusive*".

It should be noted that of the species listed in Section 4.1.4.1 of this referral, Latham's Snipe occurs most reliably within the Jerrabomberra Wetlands Nature Reserve during the migratory period, with the remaining species, including Australian Painted Snipe, usually occurring in limited numbers and considered generally uncommon, rare, or vagrant at the Jerrabomberra Wetlands Nature Reserve and wider locality (ACT Government, 2018). Additionally, as noted in Section 4.5.1.2 of this referral, it is considered that the project area and wider Jerrabomberra Wetlands Nature Reserve meet the definition of nationally important habitat for Latham's Snipe.

Following advice received on 29 February 2024 by Lori Gould, a local researcher specialising in Latham's Snipe, to the minimise risk of disturbance to this sensitive species during its migration, the following additional restrictions/considerations should be placed on the timing of works within the Jerrabomberra Wetlands Nature Reserve:

- No works are to be undertaken in proximity to indicative roosting areas or indicative foraging habitat (Attachment A, Figure 7, Page 47) between 1 August and 31 March inclusive.

In addition to the above, construction works undertaken outside of 1 August to 31 March, including clearing of vegetation and other associated groundworks and machinery movements, will be limited as far as practicable within and around riparian areas supporting native fringing vegetation with the objective of maximising the retention of suitable foraging and movement habitat for migratory shorebirds.

As soon as practicable following construction, any area within which vegetation disturbance occurred to facilitate the proposed action should be reinstated to the same or similar condition to that it was in prior to undertaking the proposed action (see Attachment A, Section 2.2, Page 5 - 7 and Figure 3a - 3g, Page 29 - 35).

Additional avoidance and mitigation measures such as sediment monitoring and erosion control (see Attachment F, Section 7, Page 20 and Appendix I, Page 45) noise and vibration monitoring and control (see Attachment F, Appendix D, Page 32), contamination management (See Attachment G, Section 2 - 4, Page 3 - 9), and biosecurity processes (See Attachment F, Section 6, Page 15) are to be implemented to further minimise the likelihood of direct and/or indirect impacts on protected matters.

Note: Figure 7 of Attachment A has been redacted from public view due to the inclusion of sensitive species location data.

Note 2: Attachment F is not to be made publicly available due to inclusion of maps, GPS locations, and photographs of indigenous heritage sites.

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

No offsets are proposed. All direct impacts potentially constituting a ‘significant impact’ on MNES are expected to be effectively mitigated through the measures described in Section 4.1.4.10 of this referral.

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 proposed 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 proposed action is not situated in or near a Commonwealth Marine Area.

4.1.8 Great Barrier Reef

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

No

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

The proposed project area is located > 1200 km from the Great Barrier Reef.

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 proposed action is not related to a large coal mining development 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.

Direct impact	Indirect impact	Commonwealth land area
No	No	Defence - ROYAL MILITARY COLLEGE - DUNTROON
No	No	Defence - RUSSELL HILL COMPLEX

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

No

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

The proposed action is not within and does not involve Commonwealth Land.

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.

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

No

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

The proposed action is in Australia and will not impact any Commonwealth heritage places overseas.

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)

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)
- 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. *

A Works Approvals modification application (WA102683) was lodged with the NCA in December 2022 for demolition of the overhead powerlines and revised cable alignments in the Wetlands – please refer to Attachment C.

However, due to identification of unexpected Aboriginal artefacts within the proposed disturbance footprint, the previously proposed northern route needed to be amended to avoid this area. As such, a new alignment was proposed.

Please note that Attachment D (Cultural Heritage Assessment, April 2024) will not be made publicly available due to cultural sensitivity reasons

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024	No	High
#3.	Document	Att B-Causeway Decomissioning Nominal Impact-2024.pdf Nominal Impact Figure	24/04/2024	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att D-Cultural Heritage Assessment-2024.pdf Cultural Heritage Assessment	19/04/2024	Yes	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	29/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	16/09/2024		High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High

#3.	Link	Resources and Values of Jerrabomberra Wetlands http://www.markbutz.com/JerrabomberraWetlandsRep..			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att D-Cultural Heritage Assessment-2024.pdf Cultural Heritage Assessment	18/04/2024	Yes	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	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Link	2022-2023 snipe survey results and other news https://lathamssnipeproject.wordpress.com/news/p..	11/10/2023		High
#4.	Link	Action Plan for Listed Migratory Species - March 2018 https://hdp-au-prod-app-act-yoursay-files.s3.ap-..			High
#5.	Link	Approved Conservation Advice https://www.environment.gov.au/biodiversity/thre..			High
#6.	Link	Conservation Advice for Gallinago hardwickii https://www.environment.gov.au/biodiversity/thre..			High
#7.	Link	EPBC Act Policy Statement 3.21 https://www.agriculture.gov.au/sites/default/fil..			High
#8.	Link	Matters of National Environmental Significance - Significant impact guidelines 1.1 https://www.dcceew.gov.au/sites/default/files/do..			High

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

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Link	Matters of National Environmental Significance - Significant impact guidelines 1.1 https://www.dcceew.gov.au/sites/default/files/do..			High

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	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		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	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Document	Att F-EvoEnergy Concept CEMP-2024.pdf Concept Construction Environmental Management Plan	25/10/2024	Yes	High
#4.	Document	Att G-Contamination Management Plan-2024.pdf Contamination Management Plan	01/10/2024		High
#5.	Link	East Lake Electrical Infrastructure Relocation and Upgrade (2009/5253) https://epbcpublicportal.environment.gov.au/all-..			High
#6.	Link	Migratory Species Action Plan - March 2018 https://hdp-au-prod-app-act-yoursay-files.s3.ap-..			High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Link	2022-2023 snipe survey results and other news https://lathamssnipeproject.wordpress.com/news/p..	11/10/2023		High
#4.	Link				

		Conservation Advice for Gallinago hardwickii https://www.environment.gov.au/biodiversity/thre..		High
#5.	Link	Conservation Advice for Limosa lapponica baueri https://www.environment.gov.au/biodiversity/thre..		High
#6.	Link	Migratory Species Action Plan - March 2018 https://hdp-au-prod-app-act-yoursay-files.s3.ap-..		High

4.1.5.5 (Migratory Species) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Link	Matters of National Environmental Significance - Significant impact guidelines 1.1 https://www.dcceew.gov.au/sites/default/files/do..			High

4.1.5.9 (Migratory Species) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A-Ecological Impact Assessment-2024.pdf Ecological Impact Assessment	28/05/2024	Yes	High
#2.	Document	Att A-Ecological Impact Assessment-2024-REDACTED.pdf Ecological Impact Assessment - Figure 7 redacted	15/09/2024		High
#3.	Document	Att F-EvoEnergy Concept CEMP-2024.pdf Concept Construction Environmental Management Plan	24/10/2024	Yes	High
#4.	Link	East Lake Electrical Infrastructure Relocation and Upgrade (2009/5253) https://epbcpublicportal.environment.gov.au/all-..			High
#5.	Link	Migratory Species Action Plan - March 2018 https://hdp-au-prod-app-act-yoursay-files.s3.ap-..			High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C-PreviousProjectDesign-2022.png Previous project design - document extract	01/12/2022	No	High
#2.	Document	Att D-Cultural Heritage Assessment-2024.pdf Cultural Heritage Assessment	18/04/2024	Yes	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	50607364358
Organisation name	CAPITAL ECOLOGY PTY LTD
Organisation address	2620 NSW
Representative's name	Robert Speirs
Representative's job title	Director / Principal Ecologist
Phone	0412474415
Email	rob@capitalecology.com.au
Address	PO Box 854, Gungahlin ACT 2912

☑ 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, **Robert Speirs of CAPITAL ECOLOGY 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	27105505367

Organisation name	Suburban Land Agency
Organisation address	2602 ACT
Representative's name	Michael Britton
Representative's job title	Project Manager - Urban Estates
Phone	02 6207 9530
Email	michael.britton@act.gov.au
Address	Dickson Office Building, 480 Northbourne Avenue, Dickson ACT 2602

☑ 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, **Michael Britton of Suburban Land Agency**, 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, **Michael Britton of Suburban Land Agency**, 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. *