

Bullsbrook South - Stage 1 Residential Development

Application Number: 02558

Commencement Date:
19/08/2024

Status: Locked

1. About the project

1.1 Project details

1.1.1 Project title *

Bullsbrook South - Stage 1 Residential Development

1.1.2 Project industry type *

Residential Development

1.1.3 Project industry sub-type

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1.1.4 Estimated start date *

01/03/2025

1.1.4 Estimated end date *

30/06/2030

1.2 Proposed Action details

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

The proposed action is for the residential development of the following Lots: Lot 100 Great Northern Highway, a portion of Lot 4 Lage Road and a portion of Lot 900 Lage Road in Bullsbrook, Western Australia, 6084 (Attachment A - Figure 1 - Site Location). (116.05199/-31.67972).

Bullsbrook Townsite District Structure Plan (Bullsbrook DSP) (Attachment B - Bullsbrook DSP) was prepared under the provisions of the City of Swan's Local Planning Scheme and approved by the Western Australian Planning Commission in 2018. The Bullsbrook DSP provides guidance and advocacy for development of the townsite to 2031 and beyond. The Bullsbrook Townsite Land Use Master Plan (Attachment C - Bullsbrook Townsite Land Use Master Plan) intended to provide guidance for the future urban growth of the area to create a livable town which is sustainable, vibrant and prosperous to meet the predicted growth in population of Perth's metropolitan area. The Bullsbrook South Urban Expansion Area (Attachment D - Figure 2 - Bullsbrook South Urban Expansion Area) has been proposed for residential development to support the establishment of the Bullsbrook Townsite.

The Bullsbrook South Urban Expansion Area is zoned Rural under the City of Swan Local Planning Scheme No 17 and as Urban deferred under the Metropolitan Region Scheme (MRS). The Urban Deferred zone was achieved in 2018, when the land was amended from Rural Zone (MRS 1323/41) (Attachment E - MRS Amendment 1323-41). An MRS Amendment is currently in progress and will facilitate future residential development, a neighbourhood centre, areas of public open space, a primary school and associated playing fields and conservation area.

During the consultation process for the South Bullsbrook MRS Amendment (MRS 1323/41) (Attachment E - MRS Amendment 1323-41) comments were received from the Water Corporation with regard to the capacity for existing wastewater infrastructure to service the proposed Bullsbrook South Urban Expansion Area. It was noted that the indicative capital costs for bulk wastewater infrastructure (wastewater pump stations, pressure mains, mains sewers upstream of Barrambie Way Waste Water Pump Station (WWPS), and upgrades to Barrambie Way WWPS) to service the entire South Bullsbrook Urban Expansion Area together with planned urban expansion in North Ellenbrook is estimated to be over \$60 million. Bulk works of this scale, cost and technical complexity would usually be delivered by the Water Corporation over many decades as the land between Ellenbrook and South Bullsbrook is incrementally developed. The ability to bring forward works of this scale has not yet been demonstrated to be technically feasible and the Water Corporation is not able to advance capital funding of this quantum to undertake these works earlier than would normally be required. (Attachment F - Water Corp Lifting Response; Pages: 1 & 2).

Availability of wastewater infrastructure to service the entirety of the Bullsbrook South Landholdings has a probable timeframe of 10 + years. It was noted by the Water Corporation that a portion of the Bullsbrook South Landholdings (560 Lots located in the northern portion of the landholding) could be serviced as it fell within the catchment of the planned South Bullsbrook Interim WWPS (CS03513) that is due to be completed in mid 2025. (Attachment G - Water Corp Correspondence - pages 2 & 4).

Bullsbrook South - Stage 1, has therefore been initiated to facilitate land development in this area in accordance with Bullsbrook Townsite District Structure Plan (Bullsbrook DSP) (Attachment B - Bullsbrook DSP) and taking into consideration the availability of wastewater infrastructure in the short term.

The proposed residential development is Stage 1 of the Bullsbrook South residential development. The project will involve the clearing of vegetation from the Site to facilitate future residential development and areas of public open space, including the installation of infrastructure and services associated with residential development, including:

- Establishment of the works site with security fencing.
- Installation of temporary services to the perimeter of the development area.
- Installation of stormwater and environmental controls to manage stormwater flows and sediment runoff.
- Construction of civil infrastructure including bulk earthworks, sewer, stormwater, electrical, telecommunication services, road pavement (including kerb and gutter), footpaths, and retaining walls.
- Establishment of temporary construction facilities – including stockpiles – within the identified development footprint.
- Construction of residential housing, temporary exhibition homes, and open spaces.

- Landscaping of street verges and public and private spaces.
- Revegetation works within the Nambad Brook.
- Ongoing conservation management of trees retained within the development.

The Site is 46.49 ha and is currently mapped as the following vegetation types:

- VT01: Scattered paddock trees and denser groves of *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grassland. Mid and ground stratum absent (3.72 ha).
- VT Creek: Open woodland of *Eucalyptus rudis*, *Corymbia calophylla* and scattered *Eucalyptus wandoo*. Very occasional *Melaleuca raphiophylla* and *Taxandria linearifolia*. Ground stratum pasture grasses (1.73 ha).
- VT Drain: Minor drainage line with *Eucalyptus wandoo* over pasture grass (0.99 ha).
- VT Planted trees: Species typically non endemic including *Eucalyptus camaldulensis*, *Eucalyptus grandis*, *Corymbia citriodora* and endemic *Casuarina obesa* (1.32 ha).
- VT Paddock: Paddock with very isolated *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grasses (38.64 ha).

(Attachment H - Figure 2 - Vegetation Types)

The proposed works within the Site for the residential development (including buildings and associated infrastructure) will result in a total disturbance of 53 scattered trees with a footprint of 0.49 ha.

The development will avoid impacts to a total area of 7.39 ha of vegetation comprising:

- 4.16 ha Nambad Brook foreshore reserve.
- 185 BC habitat trees (including breeding and foraging species), comprising an area of 1.46 ha. Some of these trees are located within the Nambad Brook foreshore area.

In summary, the current Site covers an area of 46.49 ha. This includes:

- Disturbance footprint of 0.51 ha
- Avoidance area of 4.18 ha
- Retention area of 3.79 ha (Nambad Brook foreshore reserve)

Attachment F and G will not be made publicly available due to containing sensitive information. A redacted version of the documents will be published.

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)?

Yes

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

The Bullsbrook South Urban Expansion Area is zoned Rural under the City of Swan Local Planning Scheme No 17 and as Urban deferred under the Metropolitan Region Scheme (MRS). The Urban Deferred zone was achieved in 2018, when the land was amended from Rural Zone (MRS 1323/41) (Attachment E -

MRS Amendment 1323-41). An MRS Amendment is currently in progress and will facilitate future residential development, a neighbourhood centre, areas of public open space, a primary school and associated playing fields and conservation area.

During the consultation process for the South Bullsbrook MRS Amendment (MRS 1323/41) (Attachment E - MRS Amendment 1323-41) comments were received from the Water Corporation with regard to the capacity for existing wastewater infrastructure to service the proposed Bullsbrook South Urban Expansion Area. It was noted that the indicative capital costs for bulk wastewater infrastructure (wastewater pump stations, pressure mains, mains sewers upstream of Barrambie Way Waste Water Pump Station (WWPS), and upgrades to Barrambie Way WWPS) to service the entire South Bullsbrook Urban Expansion Area together with planned urban expansion in North Ellenbrook is estimated to be over \$60 million. Bulk works of this scale, cost and technical complexity would usually be delivered by the Water Corporation over many decades as the land between Ellenbrook and South Bullsbrook is incrementally developed. The ability to bring forward works of this scale has not yet been demonstrated to be technically feasible and the Water Corporation is not able to advance capital funding of this quantum to undertake these works earlier than would normally be required. (Attachment F - Water Corp Lifting Response; Pages: 1 & 2).

Availability of wastewater infrastructure to service the entirety of the Bullsbrook South Landholdings has a probable timeframe of 7 + years. It was noted by the Water Corporation that a portion of the Bullsbrook South Landholdings (560 Lots located in the northern portion of the landholding) could be serviced as it fell within the catchment of the planned South Bullsbrook Interim WWPS (CS03513) that is due to be completed in mid 2025. (Attachment G - Water Corp Correspondence - pages 2 & 4).

Bullsbrook South - Stage 1, has therefore been initiated to facilitate land development in this area in accordance with Bullsbrook Townsite District Structure Plan (Bullsbrook DSP) (Attachment B - Bullsbrook DSP) and taking into consideration the availability of wastewater infrastructure in the short term.

Attachment F and G will not be made publicly available due to containing sensitive information. A redacted version of the documents will be published.

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

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage nationally protected plants, animals, habitats, and places. The proposed development is likely to impact Matters of National Environmental Significance (MNES) protected and managed under the EPBC Act and is therefore referred through this application.

Environmental Protection Act 1986

The *WA Environmental Protection Act 1986* (EP Act) provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement, and management of the environment and for matters incidental or connected with the foregoing.

Planning and Development Act 2005

The *WA Planning and Development Act 2005* provides for an efficient and effective land use planning system in the State and promote the sustainable use and development of land in the State. The project area is currently zoned 'Urban Deferred' under the Metropolitan Region Scheme (MRS) and as General Rural under the City of Swan Local Planning Scheme No. 7 (LPS 17). To permit the proposed development, the project area will require a change in zoning under an MRS and LPS amendment.

Biodiversity Conservation Act 2016

The WA *Biodiversity Conservation Act 2016* (BC Act) provides for the conservation and protection of biodiversity and the ecologically sustainable use of biodiversity components in WA. The BC Act lists threatened species and communities at the State level.

Commonwealth Policy and Guidelines

Government of Australia (2013) EPBC Act 1999 Policy Statement 1.1 Significant Impact Guidelines - Matters of National Environmental Significance

Government of Australia (2022) Referral guideline for three WA threatened black cockatoo species: Carnaby's cockatoo (*Zanda latirostris*), Baudin's cockatoo (*Zanda baudinii*) and the Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*).

Government of Australia (n.d) EPBC Act 1999 Policy Statement for Staged Developments-Split Referrals.

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. *

Extensive consultation has been undertaken during the Metropolitan Regional Scheme Amendment process for the Bullsbrook South Landholding (MRS Amendment 1323/41) (Attachment I - MRS 1323-41 - Submissions Report; Schedule 1, Pages 12-110).

Comments were received by:

- ATCO Gas Australia.
- Department of Biodiversity, Conservation and Attractions (DBCA) (Parks and Wildlife Service, Rivers and Estuaries Branch and Parks and Wildlife Services, Swan Region).
- Department of Communities.
- Department of Education.
- Element (on behalf of owner Boral Bricks Western Australia Pty Ltd).
- Department of Fire & Emergency Services (DFES).
- Department of Health.
- Department of Jobs, Tourism, Science and Innovation, (Infrastructure and Land Planning).
- Main Roads WA.
- Department of Mines, Industry Regulation and Safety.
- Department of Primary Industries and Regional Development (DPIRD).
- Public Transport Authority of WA.
- Rowe Group (on behalf of the majority landholders in the South Bullsbrook Urban Precinct).
- Bullsbrook Residents and Ratepayers Association Incorporated
- City of Swan.
- Department of Transport.
- Department of Water and Environmental Regulation (DWER) (Swan Avon Region).
- Water Corporation.

Consideration has been given to all comments revied with further consultation and correspondence undertaken with Water Corporation, DWER, City of Swan in particular to achieve satisfactory outcomes.

An archaeological survey and ethnographic consultation was undertaken on Lot 4 & Lot 900 Lage Road, Bullsbrook by Ethnoscience and Snappy Gum Heritage Services in March 2024 with an additional survey undertaken in April 2024. The survey was undertaken as a pedestrian survey targeting areas of high visibility along firebreaks, exposures, mature vegetation and sandy hollows. Two Indigenous stakeholders were involved in the archaeological survey and eight Indigenous stakeholders were involved in the ethnographic consultation.

The primary concerns of the Indigenous stakeholders were:

- The avoidance/management of the archaeological sites.
- The salvage of material that might be disturbed by the proposed development.
- Monitoring of ground disturbance.
- Retention of mature trees, including moodjar or native Christmas trees (*Nuytsia floribunda*), because of the latter's special cultural significance.
- Telling the story of the country.

No objections to the proposed Mirvac South Bullsbrook developments, including the construction of a crossing on Nambad Brook, were raised by the Indigenous stakeholders.

A Ministerial consent under s18 of the AHA will be required to use the land on which previously listed, and newly recorded sites are located. This includes such activities as residential construction, construction of the Nambad Brook crossing and revegetation. (Attachment J - Heritage Surveys).

Attachment J - Heritage Survey will not be made publicly available due to cultural sensitivity reasons, a redacted document will be published.

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.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint. Alternatively, email us at privacy@awe.gov.au.

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

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	19652083013
Organisation name	WESTERN ENVIRONMENTAL APPROVALS PTY LTD
Organisation address	6005 WA

Referring party details

Name	Penny Norman
Job title	Senior Consultant
Phone	0439876301
Email	penny.n@westenv.com.au
Address	Unit 5, 162 Colin St, West Perth WA 6005

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	81095901769
Organisation name	MIRVAC (WA) PTY LIMITED

Organisation address 6000 WA

Person proposing to take the action details

Name Priya Correia

Job title Senior Development Manager

Phone +61 8 9424 9806

Email priya.correia@mirvac.com

Address Level 39, 108 St Georges Terrace Perth WA 6000 Australia

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. *

Mirvac has a strong track record of delivering positive environmental outcomes in the communities in which it operates. Winning as a consortium partner, it helped to deliver the first solar suburb in Australia at Newington in Sydney (2000), built one of the most environmentally-friendly retail centres at Orion in Queensland (2008), and since 2010 has delivered a number of homes aimed at helping its customers reduce their energy bills, as well as their carbon footprint.

Mirvac reports transparently to a range of Environment, Social and Governance performance indices on topics spanning the breadth of ESG including:

- Principles for Responsible Investment (PRI) – Mirvac rate A+ for strategy, governance, and property
- National Greenhouse and Energy Reporting – Mirvac reports its mandatory disclosure in accordance with the NGERs Act
- Morgan Stanley Capital International (MSCI) – Mirvac hold AAA rating
- Global Reporting Initiative (GRI) – Mirvac reports against the GRI G4 guidelines
- LBG Australian & New Zealand – Mirvac's community investment is verified with LBG

In 2016 the Department investigated an alleged breach by Mirvac WA Pty Ltd of the EPBC Act 1999. In response Mirvac WA Pty Ltd entered into a Deed in which it agreed to undertake agreed works and monitoring (Attachment K - Deed of Undertaking). Upon completion of these requirements to the

Department's satisfaction in September 2018 (Attachment L - Letter - Jane Brook EPBC Compliance) the Department agreed not to pursue further action, or to perform and exercise any statutory and / or discretionary powers under the Act in relation to the alleged contravention. Mirvac is otherwise not aware 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 either (a) the person proposing to make the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

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

Mirvac's approach to Environmental, Social and Governance (ESG) is captured under its sustainability strategy, This Changes Everything. The strategy sets out three key environmental targets: to be net positive in carbon and water and send zero waste to landfill by 2030. (Attachment M - Mirvac_TCE Strategy)

Mirvac has released its plans on how it will achieve net positive carbon, net positive water and send zero waste to landfill. (Attachment N - Mirvac_Planet Positive Water and Attachment O - Mirvac_Planet Positive Waste and Attachment P - Mirvac_Carbon Report)

Mirvac's Responsible Investment policy outlines the way in which Mirvac considers its environmental impact when acquiring new commercial assets or residential projects. New business teams are required to factor in ESG-related risks and ensure that any identified risks are assessed and appropriately managed.

Mirvac Group's Biodiversity policy demonstrates Mirvac's commitment to protecting existing biodiversity, enhancing biodiversity on a site, and restoring biodiversity. Mirvac has an integrated HSE Management System, under which its Mirvac Minimum Requirements in Environmental Management are set out. Mirvac engages external principal contractors with certified management systems for site works.

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 81095901769

Organisation name MIRVAC (WA) PTY LIMITED

Organisation address 6000 WA

Proposed designated proponent details

Name	Priya Correia
Job title	Senior Development Manager
Phone	+61 8 9424 9806
Email	priya.correia@mirvac.com
Address	Level 39, 108 St Georges Terrace Perth WA 6000 Australia

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	19652083013
Organisation name	WESTERN ENVIRONMENTAL APPROVALS PTY LTD
Organisation address	6005 WA
Representative's name	Penny Norman
Representative's job title	Senior Consultant
Phone	0439876301
Email	penny.n@westenv.com.au
Address	Unit 5, 162 Colin St, West Perth WA 6005

✔ 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	81095901769
Organisation name	MIRVAC (WA) PTY LIMITED
Organisation address	6000 WA
Representative's name	Priya Correia

Representative's job title	Senior Development Manager
Phone	+61 8 9424 9806
Email	priya.correia@mirvac.com
Address	Level 39, 108 St Georges Terrace Perth WA 6000 Australia

✔ 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

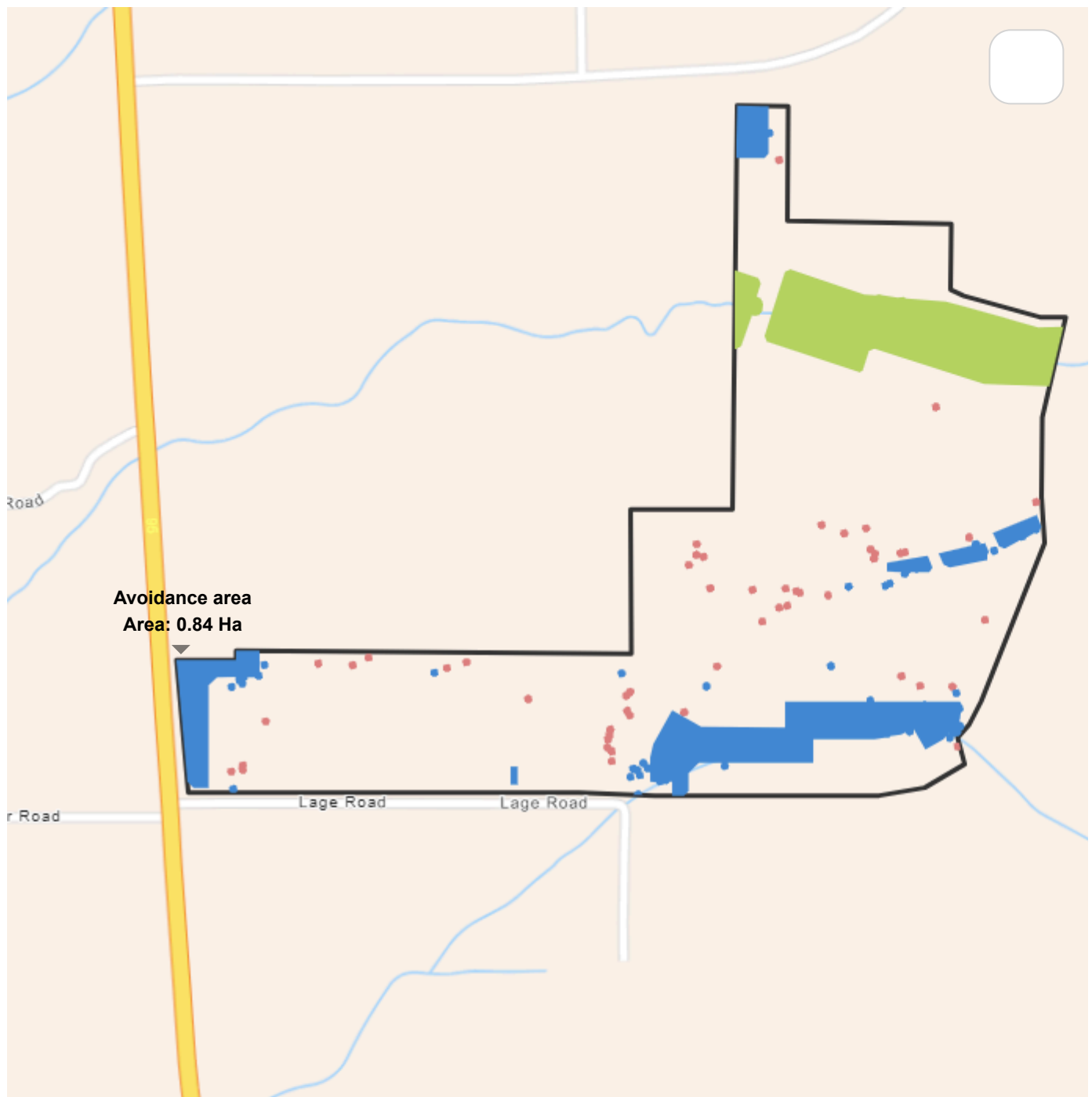
1.4 Payment details: Payment allocation

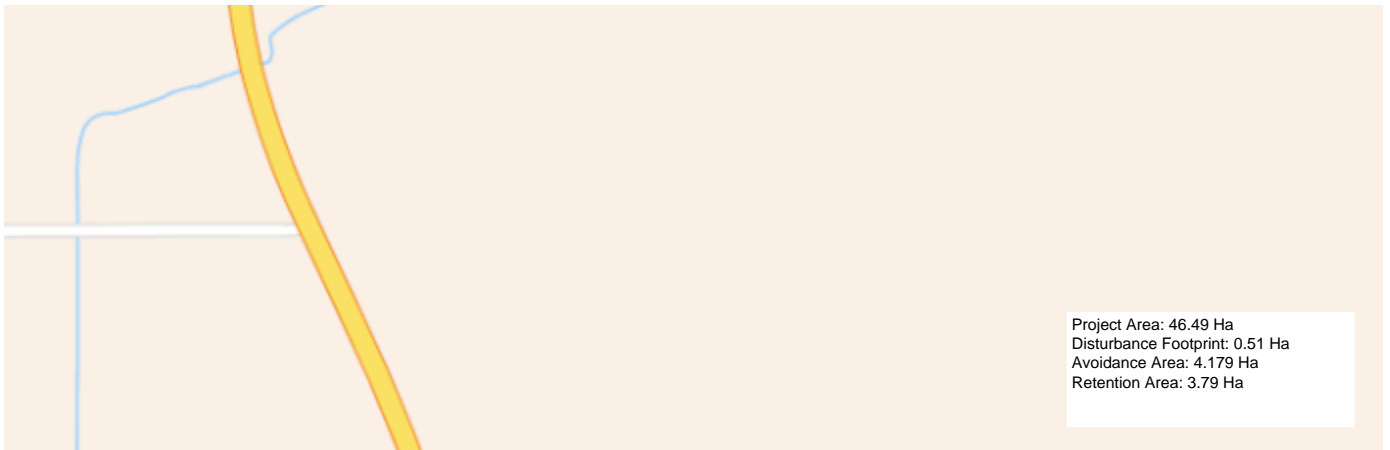
1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint





Maptaskr © 2024 -31.683236, 116.033199

Powered By Esri - Sources: Esri, TomTom, Garmin, F...

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Lot 100 Great Northern Highway, portion of Lot 4 Lage Road and a portion of Lot 900 Lage Road

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

Western Australia

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? *

Lot 100 Great Northern Highway, Lot 4 Lage Road and Lot 900 Lage Road in Bullsbrook, Western Australia, 6084 are all owned privately as freehold land.

3. Existing environment

3.1 Physical description

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

The Site is situated in Bullsbrook South, in the City of Swan approximately 33.90 km northeast of Perth Central Business District (Attachment A - Figure 1 - Site Location). The Site is zoned Urban Deferred under the Metropolitan Region Scheme (MRS), and General Rural and Landscape under the City of Swan Local Planning Scheme (LSP) 17. The Urban Deferred zone was achieved in 2018, when the land was amended from Rural Zone (MRS 1323/41) (Attachment E - MRS Amendment 1323-41). An MRS Amendment to achieve an Urban zone had been lodged and will facilitate future residential development, a neighbourhood centre, areas of public open space, a primary school and associated playing fields and conservation areas.

The Site is 46.49 ha and is currently mapped as the following vegetation types:

- VT01: Scattered paddock trees and denser groves of *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grassland. Mid and ground stratum absent (3.72 ha).
- VT Creek: Open woodland of *Eucalyptus rudis*, *Corymbia calophylla* and scattered *Eucalyptus wandoo*. Very occasional *Melaleuca raphiophylla* and *Taxandria linearifolia*. Ground stratum pasture grasses (1.73 ha).
- VT Drain: Minor drainage line with *Eucalyptus wandoo* over pasture grass (0.99 ha).
- VT Planted trees: Species typically non endemic including *Eucalyptus camaldulensis*, *Eucalyptus grandis*, *Corymbia citriodora* and endemic *Casuarina obesa* (1.32 ha).
- VT Paddock: Paddock with very isolated *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grasses (38.64 ha).

(Attachment H - Figure 2 - Vegetation Types)

According to a flora and vegetation assessment undertaken by WEPL in May 2023 (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, pp. 37-42, Attachment R - Bullsbrook South EAR 2023, Part II & Attachment S - Bullsbrook South EAR 2023, Appendix A - E), the Site does not contain any intact remnant native vegetation. The whole Site of 46.49 ha was assessed as being in 'Completely Degraded' condition. A substantial portion of the Site has been historically cleared or heavily disturbed for pasture.

The land immediately adjoining the northern boundary of the Site is zoned Residential Development under the LPS, and Urban under the MRS. To the east of the Site boundary the land is zoned Landscape under the LPS, and Rural under the MRS. South of the Site boundary is zoned as General Rural, and west of the Great Northern Highway situation on the western boundary to the Site is zoned as Special Use under the LPS. South and southwest of the Site boundary is zoned as Urban Deferred, southeast of the Site boundary zoned as Rural, and west of the Site boundary is zoned as Primary Regional Road on the Great Northern Highway, with west of this being zoned as Industrial under the MRS.

The Site is accessible from the southwest boundary via Lage Road which adjoins the Great Northern Highway, the major highway that links Perth city with the north of Western Australia. Lage Road veers off to the south approximately 600 m off the Great Northern Highway for approximately 202 m before the road ends. There are also another two access points northwest of the Site boundary approximately 197 m north of Lage Road and west of the Site boundary approximately 397 m north of Lage Road, which are accessible via the Great Northern Highway.

Attachments Q, R and S will not be made publicly available due to containing sensitive information. A redacted version of the documents will be published.

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

The Site is currently used as rural residential land comprised of dwellings and sheds.

An MRS Amendment to achieve an Urban zone over the Site has been lodged and will facilitate future residential development and areas of public open space.

According to a flora and vegetation assessment undertaken by WEPL in May 2023 (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, pp. 37-42), the Site does not contain any intact remnant native vegetation. The whole Site of 46.43 ha was assessed as being in 'Completely Degraded' condition. A substantial portion of the Site has been historically cleared or heavily disturbed for pasture. Further detail of the flora, vegetation, and fauna habitat values present within the project area is outlined in Section 3.2.

The surrounding land is mainly used for rural residential purposes.

The Valley Bullsbrook Landfill Facility is located approximately 350 m north of the northernmost tip of the Site. The distance between the boundary of the subject land and closest point of the landfill operations is 270 m.

The Swan Valley Nursery is located in the north of the western portion of the Site.

An active clay extraction facility lies approximately 560 m south-east of the Site. The clay extraction facility is operated by Midland Brick. The active pit is Stage 1 of the three stage Bullsbrook South Development. The three-stage development was initiated in 2014 and is expected to extract up to 125 000 tonnes schist - clay per year, with a project life of 20 plus years across the three stages.

The Walyunga National Park is located approximately 550 m south-east of the Site.

Immediately to the west of the Site is the Great Northern Highway. To the west of the Great Northern Highway (< 1 km) are a mix of commercial/industrial and agricultural land uses, including TGA pallets (pallet manufacturer), produce suppliers (livestock producer), Allwood Stud Farm, Tannamurra bed and breakfast, Kalgrain Weighbridge and Glomax Riding Pony Stud, the land to the west of the Great Northern Highway is zoned Industrial. RAAF Base Pearce is located approximately 800 m north-west and is zoned Public Purposes - Commonwealth Government.

Attachment Q will not be made publicly available due to containing sensitive information. A redacted version of the document will be published.

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

The eastern portion of the Site falls within the South Western Australia Temperate Forests Conservation Management Zone, and the western portion of the Site falls within the Swan Coastal Plain Shrublands and Woodlands Conservation Management Zone. There is one mapped linear surface water hydrological feature on the Site, with the Nambad Brook running east to west through the northern portion. There is no mapped floodplain for this waterway. The Walyunga National Park (R 2065) is located approximately 2.6 km to the southeast. Other important natural values recognised on the Site are discussed in sections 3.2 and 4.

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

Mapped topography of the Site indicates a clearly defined valley feature running east to west associated with the Nambad Brook and a minor drainage line running in parallel 100-150 m north of the Nambad Brook. In the central portion of the Site a broad drainage feature is present with two branches originating in the east and joining in the centre of the Site before heading west.

The gradient of the Site is undulating and ranges from 42 m Australian Height Datum (mAHD) in the south-western corner to 94 mAHD in the south-east (Department of Primary Industries and Regional Development [DPIRD]-072).

****Note** that throughout this referral application, reference is made to WA State-managed spatial datasets. The naming convention for these datasets is the WA Department acronym (most commonly DBCA, DPIRD, DPLH, and DWER) followed by a hyphen and number (e.g. DPIRD-072 used above). The relevant Department is provided in full the first time each is used, and the complete dataset can be accessed using the associated link provided.

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.

Flora and vegetation

A Reconnaissance flora and vegetation, basic fauna and targeted black cockatoo assessment was undertaken across the Site by WEPL in May 2024 (Attachment S - South Bullsbrook EAR 2023 Appendix A - E, Appendix E p. 115). This assessment was undertaken by a Senior Environmental Scientist with over 10 years' experience. The assessment comprised of a literature review, desktop assessment and database searches, and field survey.

The Site is located within the breeding range for Carnaby's cockatoo (*Zanda latirostris*) and in the Likely to Occur range for Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*). The Site falls outside the modelled distribution for Baudin's black cockatoo (Link #7 - DAWE. (2022) *Referral Guideline for 3 Black Cockatoo Species*).

The field survey covered the following:

- Vegetation description and classification using the height and estimated cover of dominant and characteristic species of each stratum based on the National Vegetation Information System (NVIS), recorded at Level V (Link # 10 - NVIS Technical Working Group, 2017).
- Vegetation condition assessment during the vegetation scale for the Swan Coastal Plain bioregion (Link # 8 - EPA. (2016) Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment).
- Identification of suitable foraging habitat for black cockatoo species based on plants known to provide food resources for Carnaby's cockatoo (*Zanda latirostris*), and Forest red-tailed black

cockatoo (*Calyptorhynchus banksii naso*).

- Identification of potential breeding habitat for black cockatoos based on the presence of trees of a suitable size and species to develop hollows for black cockatoo nesting.
- Identification of current and potential roosting habitat, based on the presence of tall trees (in the context of the landscape).
- Identification of black cockatoo presence (including direct sightings, audible calls, foraging residue, scats, or chewed trees).

The assessment also included a biophysical assessment of the minor waterway that traverses the Site. Whilst not relevant to the EPBC referral, accurate delineation of the waterway and suitable foreshore reserve width was considered important to adequately provide for future development of the Site (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.7.4, pp. 23-24).

The survey report is provided as Attachment S - South Bullsbrook EAR 2023 Appendix A - E, Appendix E p. 115 and the key findings are summarised below as they relate to MNES:

- The Site does not contain any threatened flora species, and none were assessed as having a 'high' or 'moderate' likelihood of occurrence (as based on a post-survey assessment) (Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.8.4, p. 41).
- The Site does not contain any threatened ecological communities. The vegetation present is in 'Completely Degraded' condition and has lost most understorey and mid-storey species (Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.8.4, p. 41).
- The majority of the Site has been historically cleared for pasture. Some areas of remnant isolated trees are present interspersed with paddocks and groves of native or planted non endemic eucalypts. Areas of intact remnant native vegetation habitat are not present (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, page 37).

Fauna

- Foraging habitat comprises primarily marri and wandoo trees with scattered sheoak, pines and a range of small-fruited eucalypts. Marri, pines and to a lesser extent wandoo are high value foraging species for Carnaby's cockatoo (*Zanda latirostris*) (Link #7 - DCCEEW (2022) Referral Guidance for 3 WA Black Cockatoo Species); Link #9 - Groom (2011) Plants Used by Carnaby's Cockatoo). Marri, wandoo and sheoak are high value foraging for Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Link #7 - DCCEEW (2022) Referral Guidance for 3 WA Black Cockatoo Species). Other small-fruited eucalypt species including flooded gum, planted river red gum, rose gum and lemon scented gum are considered species which may be foraged on occasion but are not assessed as high value foraging species.
- Foraging evidence (chewed marri nuts) from both Carnaby's cockatoo (*Zanda latirostris*) and Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) were opportunistically recorded within the Site. The Site provides a total of approximately 1.61 ha of foraging habitat for Carnaby's cockatoo (*Zanda latirostris*) and 1.58 ha for Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Attachment T - Figure 3 - Carnaby's Black Cockatoo Foraging Habitat; Attachment U - Figure 4 - Forest Red-tailed Black Cockatoo Foraging Habitat; Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, page 53-59). The majority of foraging trees are isolated individual trees. Foraging habitat extent was therefore calculated based on an average canopy cover of 100 m² per tree and clipped along site boundaries. Where trees occurred as consistent groves, canopy polygons were merged to create a continuous polygon, and the area of the larger polygon was used. The foraging habitat for Carnaby's cockatoo (*Zanda latirostris*) within the Site is comprised by:
 - 113 wandoo (of which 103 have a DBH ≥ 300 mm).
 - 76 marri (of which 44 have a DBH ≥ 500 mm).
 - Five pines.
- The high value foraging habitat for Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) within the Site is comprised by:

- 113 wandoo (of which 103 have a DBH \geq 300 mm).
- 76 marri (of which 44 have a DBH \geq 500 mm).
- Four sheoak.
- Approximately 1.61 ha is comprised of species with a high foraging value for Carnaby's cockatoo (*Zanda latirostris*) (marri, pines and wandoo) and 1.58 ha is comprised of high value foraging species for Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (marri, sheoak and wandoo) (Attachment T - Figure 3 - Carnaby's Black Cockatoo Foraging Habitat; Attachment U - Figure 4 - Forest Red-tailed Black Cockatoo Foraging Habitat; Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, page 53-59). The remaining vegetation is comprised of small-fruited eucalypt species that provide lower quality foraging habitat (e.g. flooded gum, river red gum and eastern states eucalypts) or no value (dead trees).
- The Site contains a total of 148 potential breeding trees with a DBH \geq 500 mm of the following species: 65 *Eucalyptus wandoo* (wandoo), 44 *Corymbia calophylla* (marri), 20 *Eucalyptus rudis* (flooded gum), six *Eucalyptus camaldulensis* (river red gum), four dead trees and nine non-endemic *Eucalyptus* sp. (Attachment V - Figure 5 - Black Cockatoo Potential Breeding Habitat; Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, page 50 -53).
- The Site contains an additional 38 trees (*Eucalyptus wandoo*) with DBH \geq 300 mm and $<$ 500 mm that are identified as potential future breeding trees (Attachment V - Figure 5 - Black Cockatoo Potential Breeding Habitat).
- Ten trees were reassessed as possessing small hollows which are of an insufficient size to support nesting ($<$ 10 cm entrance) or which have an entrance of $>$ 10 cm but the internal dimensions are not suitable or the hollow is not accessible (Class 4 trees). These Class 4 trees are however of sufficient age and growth to form breeding hollows (Attachment V - Figure 5 - Black Cockatoo Potential Breeding Habitat).
- One marri tree (tree number 551) was assessed as possessing a hollow with sufficient entry diameter to potentially support a suitable nesting hollow (Class 3 trees) (Attachment V - Figure 5 - Black Cockatoo Potential Breeding Habitat). The hollow is an upwards opening knot type hollow mid trunk with a slit type entrance of 15x 20 cm diameter. At the time of the survey, it was occupied by nesting galahs.
- The Site contains isolated stands of tall ($>$ 10 m) eucalypts which may provide suitable roosting habitat for black cockatoo species. No primary or secondary evidence of roosting was recorded (Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, pp. 59-60).

Attachments Q, R and S will not be made publicly available due to containing sensitive information. A redacted version of the documents will be published.

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

Landform Geology and Soils

The Site is located within Pinjarra Zone and the Western Darling Range Zone (DPIRD-027). The Pinjarra Zone is characterised by clayey to sandy alluvial soils with wet areas. Soils of the Western Darling Range are formed in laterite, lateritic colluvium, granite weathered in-situ and gneiss.

The Site features soils of the Forrestfield System and the Murray Valleys System, with a small intersection with the Pinjarra System (DPIRD-064). These soils are described as:

- 255Mv - Murray Valleys System: Western Darling Range from the Avon Valley to Harvey. Deeply incised valleys with red loamy earths, shallow duplexes and rock outcrop; Jarrah-Marri-Wandoo forest and woodland with mixed shrubland.
- 213Fo - Forrestfield System: Undulating foot slopes of the Darling and Whicher Scarps. Duplex sandy gravels, pale deep sands and grey deep sandy duplexes. Woodland of Jarrah, Marri and

Wandoo and some *Banksia grandis*.

- 213Pj - Pinjarra System: Swan Coastal Plain from Perth to Capel. Poorly drained coastal plain with variable alluvial and aeolian soils. Variable vegetation includes Jarrah, Marri, Wandoo, Paperbark, Sheoaks and Flooded gum.

Vegetation

Regional vegetation for the Swan Coastal Plain (at vegetation complex level) was mapped by Heddle et al. (1980) and are maintained in digital form by the Department of Biodiversity Conservation and Attractions (DBCA) (2018). The mapping indicates that the Survey Area intersects mainly with the Guildford Complex (mapping unit 32; DBCA-46), but slightly intersects with the Darling Scarp (mapping unit DS2, DBCA-047):

- Guildford Complex: A mixture of open forest to tall open forest of *Corymbia calophylla* (Marri) - *Eucalyptus wandoo* (Wandoo) - *Eucalyptus marginata* (Jarrah) and woodland of *Eucalyptus wandoo* (Wandoo) (with rare occurrences of *Eucalyptus lane-poolei* (Salmon White Gum)). Minor components include *Eucalyptus rudis* (Flooded Gum) and *Melaleuca raphiophylla* (Swamp Paperbark).
- Darling Scarp (DS2): Mosaic of open forest of *Eucalyptus marginata* subsp. *marginata*, *Corymbia calophylla*, with some admixtures with *Eucalyptus laeliae* in the north (subhumid zone), with occasional *Eucalyptus marginata* subsp. *elegantella* (mainly in subhumid zone) and *Corymbia haematoxylon* in the south (humid zone) on deeper soils adjacent to outcrops, woodland of *Eucalyptus wandoo* (subhumid and semiarid zones), low woodland of *Allocasuarina huegeliana* on shallow soils over granite outcrops, closed heath of Myrtaceae-Proteaceae species and lithic complex on or near granite outcrops in all climate zones.

The flora, vegetation, and black cockatoo assessment identified that none of the vegetation present is representative of intact, native vegetation (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, page 37).

Vegetation Types

WEPL identified five highly modified vegetation units within the Site (Attachment H - Figure 3 - Vegetation Types), which are described as:

- VT01: Scattered paddock trees and denser groves of *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grassland. Mid and ground stratum absent (3.72 ha).
- VT Creek: Open woodland of *Eucalyptus rudis*, *Corymbia calophylla* and scattered *Eucalyptus wandoo*. Very occasional *Melaleuca raphiophylla* and *Taxandria linearifolia*. Ground stratum pasture grasses (1.73 ha).
- VT Drain: Minor drainage line with *Eucalyptus wandoo* over pasture grass (0.99 ha).
- VT Planted trees: Species typically non endemic including *Eucalyptus camaldulensis*, *Eucalyptus grandis*, *Corymbia citriodora* and endemic *Casuarina obesa* (1.32 ha).
- VT Paddocks: Paddock with very isolated *Corymbia calophylla* and *Eucalyptus wandoo* over pasture grasses (38.64 ha).

Vegetation Condition

All vegetation present is in completely degraded condition (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, page 41).

Attachment Q will not be made publicly available due to containing sensitive information. A redacted version of the document will be published.

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 listed heritage places within or surrounding the Project Area.

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

The Site is located on Whadjuk Noongar Country, and forms part of the South West Native Title Settlement (Whadjuk People ILUA). The Whadjuk region is one of six regions within Noongar Country.

According to the Aboriginal Cultural Heritage Inquiry System, the entirety of the Site intersects with a registered mythological place associated with 'Ellen Brook: Upper Swan' (Place ID 3525; Attachment R - Bullsbrook EAR 2023 Part II, Figure 21: Aboriginal Heritage, p. 70). Place ID 3525 is a significant Aboriginal heritage place associated with mythological narratives of the Waugal (Attachment Q - Bullsbrook EAR 2023 Part I, Section 5.13, page 41), and is associated with the waters of the riverbed of the Ellenbrook, the main channel of which is located approximately 1.6 km west of the Site.

The northern portion of the Site intersects with the registered Aboriginal heritage site 'Ki-it Monger Brook 2' (Place ID 3583; Attachment R - Bullsbrook EAR 2023 Part II, Figure 21: Aboriginal Heritage, p. 70). The site is classified as 'Ritual / Ceremonial; Creation / Dreaming Narrative; Modified Tree'.

A small portion along the southern boundary of the Site intersects with the registered Aboriginal heritage site Place ID 4362, which is described as 'Artefacts/Scatter' (Attachment R - Bullsbrook EAR 2023 Part II, Figure 21: Aboriginal Heritage, p. 70).

The Site has been pre-referred to the South West Aboriginal Land and Sea Council (SWALSC) as part of the MRS Amendment process and no comment has been received to date.

An archaeological survey and ethnographic consultation was undertaken on Lot 4 & Lot 900 Lage Road, Bullsbrook by Ethnoscience and Snappy Gum Heritage Services in March 2024 with an additional survey undertaken in April 2024. The survey was undertaken as a pedestrian survey targeting areas of high visibility along firebreaks, exposures, mature vegetation and sandy hollows. Two Indigenous stakeholders were involved in the archaeological survey and eight Indigenous stakeholders were involved in the ethnographic consultation.

The primary concerns of the Indigenous stakeholders were:

- The avoidance/management of the archaeological sites.
- The salvage of material that might be disturbed by the proposed development.
- Monitoring of ground disturbance.
- Retention of mature trees, including moodjar or native Christmas trees (*Nuytsia floribunda*), because of the latter's special cultural significance.

- Telling the story of the country.

No objections to the proposed Mirvac South Bullsbrook developments, including the construction of a crossing on Nambad Brook, were raised by the Indigenous stakeholders.

A Ministerial consent under s18 of the AHA will be required to use the land on which previously listed, and newly recorded sites are located. This includes such activities as residential construction, construction of the Nambad Brook crossing and revegetation. (Attachment J - Heritage Surveys).

Attachment J - Heritage Survey will not be made publicly available due to cultural sensitivity reasons, a redacted document will be published.

Attachments Q and R will not be made publicly available due to containing sensitive information. A redacted version of the documents will be published.

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 Hydrological Zones of Western Australia (Department of Primary Industries and Regional Development [DPIRD]-069) Coastal Plain dataset, indicates that the Site is located within the western portion of the Perth Basin, overlying the Leederville, Yarragadee and Cockleshell Gully Formations. The Perth Basin sediments range from highly permeable to impermeable, with superficial deposits generally consisting of highly permeable sands. Major aquifers are located in the sandstones of the Leederville, Yarragadee and Cockleshell Gully formations with deposits of clay and shale acting as confining (or semi-confining layers). The Yoganup Formation lies along the inland (eastern) boundary of these formations and is the major recharge area for the Perth Basin, with groundwater subsequently discharging to the Indian Ocean in the west.

Approximately four tributaries of Ellen Brook (including Nambad Brook) extend on-site (passing through Lot 900 and Lot 61), however based on available aerial imagery these appear to be dry the majority of the year (Link #1 - Landgate Mapviewer - Landgate, 2021a). There are no mapped floodplains for these waterways. There are also five dams on-site. Ellen Brook is located approximately 1.6 km west of the Site. Multiple tributaries extend off Ellen Brook in the north, including Nambad Brook (on-site) and Ki-it Monger Brook (located ~1 km west of the Site). The Avon River is located approximately 5 km south-east of the Site.

The southern half of the Site intersects with one Multiple Use category, palusplain wetland UID15282 (DBCA-019).

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

4.1.1 World Heritage

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

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

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

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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.

*

No world Heritage Matters occur within the Site.

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? *

Yes

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

The registered Aboriginal heritage site, place ID 3525, is mapped over the entire Site.

A search on the Department of Planning, Lands and Heritage (DPLH), Aboriginal Cultural Heritage Inquiry System (ACHIS) (2023) shows that the entire Site is mapped as 'Mythological', Place ID:3525, the northern edge is mapped as 'Ceremonial/Modified Tree/Mythological', Place ID:3583 and the central area is mapped as 'Artefacts/Scatter', Place ID:4362.

Ethnographic and Archaeological Surveys of the Site have been undertaken by Ethnoscience and Snappy Gum Heritage Services in March 2024 with an additional survey undertaken in April 2024. (Attachment J - Heritage Survey_Redacted).

The development will require the importation of fill that could be up to 1.5 m in some parts of the development envelope. This fill would cover newly identified archaeological scatter sites. There would also be earthworks undertaken within the site that could cause disturbance to the archaeological sites, although there is the protection of one archaeological site within public open space.

Attachment J - Heritage Survey will not be made publicly available due to cultural sensitivity reasons, a redacted document will be published

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

*

No

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

Ethnographic and Archaeological Surveys of the Site have been undertaken by Ethnoscience in 2024 (Attachment J - Heritage Survey Redacted). An archaeological survey and ethnographic consultation was undertaken on Lot 4 & Lot 900 Lage Road, Bullsbrook by Ethnoscience and Snappy Gum Heritage Services in March 2024 with an additional survey undertaken in April 2024. The survey was undertaken as a pedestrian survey targeting areas of high visibility along firebreaks, exposures, mature vegetation and sandy hollows. Two Indigenous stakeholders were involved in the archaeological survey and eight Indigenous stakeholders were involved in the ethnographic consultation.

The primary concerns of the Indigenous stakeholders were:

- The avoidance/management of the archaeological sites.
- The salvage of material that might be disturbed by the proposed development.
- Monitoring of ground disturbance.
- Retention of mature trees, including moodjar or native Christmas trees (*Nuytsia floribunda*), because of the latter's special cultural significance.
- Telling the story of the country.

No objections to the proposed Mirvac South Bullsbrook developments, including the construction of a crossing on Nambad Brook, were raised by the Indigenous stakeholders.

A Ministerial consent under s18 of the AHA will be required to use the land on which previously listed, and newly recorded sites are located. This includes such activities as residential construction, construction of the Nambad Brook crossing and revegetation. (Attachment J - Heritage Surveys Redacted).

Attachment J - Heritage Survey will not be made publicly available due to cultural sensitivity reasons, a redacted document will be published

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

No

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

*

Ethnographic and Archaeological Surveys of the Site have been undertaken by Ethnoscience in 2024 (Attachment J - Heritage Survey Redacted). An archaeological survey and ethnographic consultation was undertaken on Lot 4 & Lot 900 Lage Road, Bullsbrook by Ethnoscience and Snappy Gum Heritage Services in March 2024 with an additional survey undertaken in April 2024. The survey was undertaken as a pedestrian survey targeting areas of high visibility along firebreaks, exposures, mature vegetation and sandy hollows. Two Indigenous stakeholders were involved in the archaeological survey and eight Indigenous stakeholders were involved in the ethnographic consultation.

No objections to the proposed Mirvac South Bullsbrook developments, including the construction of a crossing on Nambad Brook, were raised by the Indigenous Stakeholders.

A Ministerial consent under s18 of the AHA will be required to use the land on which previously listed, and newly recorded sites are located. This includes such activities as residential construction, construction of the Nambad Brook crossing and revegetation. (Attachment J - Heritage Survey Redacted).

Attachment J - Heritage Survey will not be made publicly available due to cultural sensitivity reasons, a redacted document will be published

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

Wherever possible the archeological sites will be avoided during the development. Where archeological sites cannot be avoided the artefacts would be salvaged and removed to a safe place under a s18 Ministerial consent with the approval and involvement of the Indigenous community.

Mirvac is committed to commemorating Aboriginal heritage in its residential projects and 'tell the story of a place' through in the form of storytelling, interpretation signage and walk trails, etc. relating to the sites and artefacts.

The Indigenous stakeholders indicated that they would prefer that mature trees are retained in the development. This will be achieved through the minimisation of the clearing of black cockatoo habitat trees where possible, as shown in the tree retention plan (Attachment W - Figure 6 - Tree Retention). The proposed action will involve the delineation of four areas of POS, with the largest being a foreshore reserve which aligns with Nambad Brook and associated buffer area (Attachment W - Figure 6 - Tree Retention).

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

No offsets are currently proposed, as the proposed action is not considered to comprise a controlled action or to result in any significant residual 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.

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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.

*

There are no Ramsar Wetlands located on the Site.

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	Acacia anomala	Grass Wattle, Chittering Grass Wattle
No	No	Acacia aphylla	Leafless Rock Wattle
No	No	Andersonia gracilis	Slender Andersonia
No	No	Anthocercis gracilis	Slender Tailflower
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper

Direct impact	Indirect impact	Species	Common name
Yes	Yes	<i>Calyptrorhynchus banksii</i> naso	Forest Red-tailed Black-Cockatoo, Karrak
No	No	<i>Chamelaucium lullfitzii</i>	Gingin Wax
No	No	<i>Conospermum densiflorum</i> subsp. <i>unicephalatum</i>	One-headed Smokebush
No	No	<i>Darwinia foetida</i>	Muchea Bell
No	No	<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll
No	No	<i>Diplolaena andrewsii</i>	
No	No	<i>Eleocharis keigheryi</i>	Keighery's Eleocharis
No	No	<i>Grevillea christineae</i>	Christine's Grevillea
No	No	<i>Grevillea curviloba</i> subsp. <i>curviloba</i>	Curved-leaf Grevillea
No	No	<i>Grevillea curviloba</i> subsp. <i>incurva</i>	Narrow curved-leaf Grevillea
No	No	<i>Leipoa ocellata</i>	Malleefowl
No	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
No	No	<i>Rostratula australis</i>	Australian Painted Snipe
No	No	<i>Synaphea</i> sp. Fairbridge Farm (D.Papenfus 696)	Selena's Synaphea
No	No	<i>Thelymitra dedmaniarum</i>	Cinnamon Sun Orchid
No	No	<i>Thelymitra stellata</i>	Star Sun-orchid
Yes	Yes	<i>Zanda latirostris</i>	Carnaby's Black Cockatoo, Short-billed Black-cockatoo

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Banksia Woodlands of the Swan Coastal Plain ecological community
No	No	Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community

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. *

Impacts of the proposed action are estimated as:

Carnaby's Cockatoo (*Zanda latirostris*)

- Removal of the following 45 foraging trees for Carnaby's Cockatoo (*Zanda latirostris*):
 - 30 marri, of which 20 have a DBH \geq 500 mm
 - 12 wandoo with a DBH \geq 300 mm
 - Three pines

This comprises 0.43 ha high-quality foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) (quality score of 8) (Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, p. 56-58).

Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*)

- Removal of the following 42 foraging trees for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*):
 - 30 marri, of which 20 have a DBH \geq 500 mm
 - 12 wandoo with a DBH \geq 300 mm

This comprises 0.40 ha high-quality foraging habitat for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) (quality score of 8) (Attachment R - Bullsbrook South EAR 2023 Part II, Section 5.10.5, p. 56-58).

Potential Breeding and Roosting Trees for Black Cockatoo Species

- Removal of 40 mature* *Eucalyptus* sp. trees (20 marri, 12 wandoo, seven non-endemic *Eucalyptus* sp., one dead tree), which may support potential black cockatoo roosting and breeding habitat (Attachment W - Figure 6 - Tree Retention). Of those, 38 trees have a DBH \geq 500 mm and two wandoo have a DBH between 300 mm and 500 mm. None of these trees had hollows of a size suitable for black cockatoo breeding. Two of those trees (wandoo) are Bamford Class 4 trees, which either have broken off branches or hollows too small to support black cockatoo breeding.

*Mature meaning a DBH \geq 300 mm for *Eucalyptus wandoo* and \geq 500 mm for all other *Eucalyptus* sp.

- Removal of a total of 53 trees (32 trees provide both potential breeding and foraging habitat, eight trees provide breeding habitat only and 13 trees provide foraging habitat only).
- Possible indirect impacts to retained and surrounding native vegetation providing habitat for MNES through construction via noise, dust, vibration, weed and pathogen spread, increased vehicular access, and increased exposure to domestic and feral animals

The proposed action has a disturbance footprint of approximately 0.51 ha. A total area of 7.97 ha will be reserved as POS. An additional 0.32 ha of black cockatoo habitat will be remained within streetscapes (Attachment W - Figure 6 - Tree Retention).

Attachment R will not be made publicly available due to containing sensitive information. A redacted version of the document will be published.

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

*

No

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

The vegetation to be removed is comprised of isolated trees and lacks any native understorey, as such it cannot be considered remnant native vegetation.

When considering the broader landscape context of the proposed action, the surrounding area contains a substantial amount of large intact patches of native vegetation which provide suitable foraging habitat (Attachment X - Figure 7 - Black Cockatoo Foraging Habitat Extent 12 km).

The following information details the availability of foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) and Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) in the landscape context utilizing an area that represents the local area and the broader breeding zone (12 km radius) (Attachment X - Figure 7 - Black Cockatoo Foraging Habitat Extent 12 km). It should be noted that the vegetation within the Site is not considered representative of remnant native vegetation given its Completely Degraded condition (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.8.4, page 41). Conversely, the extent of habitat within 12 km of the Site has been calculated based on the extent of remnant native vegetation containing suitable foraging species (DPIRD-005; DBCA-046; DBCA-047) and is therefore likely to be in better condition to that within the Site. The description of vegetation complexes within 12 km of the Site were reviewed to identify those with dominant species that are known to provide high value foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) and Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) as reported by (Link # 4 - DAWE (2022) *Referral Guidelines for 3 WA threatened Black Cockatoo Species*).

Within a 12 km radius of the proposed action area there is approximately 20,343.55 ha of suitable foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) (Attachment X - Figure 7 - Black Cockatoo Foraging Habitat Extent 12 km). Impacts associated with the proposed action, are negligible in the regional context, causing a loss of <0.0001% of the suitable foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) within 12 km of the Site.

Within a 12 km radius of the proposed action area there is approximately 13,331.28 ha of suitable foraging habitat for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*). Based on the estimated canopy cover of foraging trees to be removed, the proposed action will impact 0.0001% of the suitable foraging habitat for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) within 12 km of the Site.

There are eleven roosting sites situated within 12 km of the proposed action, with the nearest situated 2.7 km and 3.1 km north-east, according to datasets managed by DBCA that have been confirmed as used by black cockatoo species (DBCA-050) as well as those that have been identified through the Great Cocky Count and citizen science projects as potentially in use (DBCA-064) (Attachment Y - Figure 8 - Known Black Cockatoo Roosting and Breeding Sites within 12 km Buffer).

The nearest confirmed breeding sites are situated 12 km to the north, and 13 km to the south-east of the Site (DBCA-063; Attachment Y - Figure 8 - Known Black Cockatoo Roosting and Breeding Sites 12 km Buffer).

Overall, the impacts of the proposed action to Carnaby's Cockatoo (*Zanda latirostris*) and Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) are not considered significant. The reasons for this include:

- The Site is in Completely Degraded condition and does not comprise remnant native vegetation.
- The area to be impacted represents a very small proportion of suitable foraging habitat within the broader landscape. The estimated canopy cover of 45 and 42 trees to be impacted equates to <0.0001% of habitat within a 12 km radius for Carnaby's Cockatoo (*Zanda latirostris*) and Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) respectively. Within a 12 km radius, a substantial amount of foraging habitat persists within large, intact patches, compared with the highly degraded nature of the Site (Attachment X - Figure 7 - Black Cockatoo Foraging Habitat Extent 12 km).

- None of the impacted 40 potential future breeding trees contains hollows of suitable size for black cockatoo breeding.
- The Site contains two potential ecological corridors. Both are, however, remained within POS areas, including the Nambad Brook foreshore reserve. Therefore, no impacts are proposed to significant ecological corridors and good landscape connectivity will persist for the species for the duration of the impact (Attachment W - Figure 6 - Tree Retention).

Therefore, the proposed action will not:

- Lead to a long-term decrease in the size of any population.
- Reduce the area of occupancy of the species.
- Fragment an existing population into two or more populations.
- Cause a loss of habitat critical to the survival of the species.
- Disrupt the breeding cycle of a population given there is no currently suitable breeding habitat present within the project area.
- Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.
- Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the habitat.
- Introduce disease that may cause the species to decline.
- Interfere with the recovery of the species.

The proposed action will remove a minor extent of foraging habitat (45 trees for Carnaby's Cockatoo (*Zanda latirostris*) and 42 trees for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*) however will retain 101 wandoo, 46 marri, four sheoak and two pine, within areas of POS and road verges. A total of 108 trees with a DBH \geq 500 mm and a further 38 wandoo with a DBH between 300 mm and 500 mm will be retained within POS.

Attachment Q will not be made publicly available due to containing sensitive information. A redacted version of the document will be published.

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.

*

It is recognised that the removal of up to 40 trees of a suitable size (38 trees with a DBH \geq 500 mm and 2 wandoo with a DBH \geq 300 mm and $<$ 500 mm) and species to develop hollows for black cockatoo nesting and the removal of 0.43 ha and 0.40 ha of high value foraging habitat for CBC and FRBC, respectively, has value, and that there is evidence of black cockatoos occurring (foraging) within the Site. However, in the context of the surrounding environment and broader landscape, and the absence of evidence indicating that the Site is currently or has been historically used for breeding by black cockatoos, this impact is not considered significant and therefore does not constitute a controlled action.

The level of black cockatoo usage is likely to be transitional in nature with the surrounding area (12 km radius) offering approximately 20,001.58 ha of suitable foraging habitat for Carnaby's Cockatoo (*Zanda latirostris*) and 12,989.31 ha for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*), which effectively comprises 44.2% and 28.7% of the total land area within this distance of the Site, respectively.

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. *

Avoidance

The proposed action sought to minimise the clearing of black cockatoo habitat trees where possible, as shown in the tree retention plan (Attachment W - Figure 6 - Tree Retention). The proposed action will involve the delineation of four areas of POS, with the largest being a foreshore reserve which aligns with Nambad Brook and associated buffer area (Attachment W - Figure 6 - Tree Retention). The foreshore reserve was delineated based on the results of a biophysical assessment (Attachment Q - Bullsbrook South EAR 2023 Part I, Section 5.7.4, page 23-24 & Figure 7: Biophysical Assessment).

A second large POS is situated in the south-east of the Site, as shown on Attachment W - Figure 6 - Tree Retention. A grove of eleven large marri trees will be retained within a POS area located on the western boundary of the Site. One of those trees is tree number 551, a Class 3 tree, which contains a hollow of suitable size for black cockatoo breeding that is currently occupied by galahs. The hollow provides potential future breeding habitat.

Additionally, the first draft concept design was modified to allow for the retention of more trees in streetscapes. The sewer alignment was relocated from the western side to the eastern side of the road, which runs southwards from the most northern extension of the Site. This allowed for the retention of an additional mature marri tree within the road verge, which belongs to a grove of trees within the most northern POS.

Further avoidance was implemented after a pre-referral meeting with DCCEEW on 6 September 2024. The decision was made to allow for as many trees as possible within road reserves and potentially adjust future detailed lot designs if required. A commitment was made to retain an additional 3 marri, one wandoo, and one pine.

The development will result in the retention of at least 185 trees in total that provide black cockatoo species habitat. Of those trees, 115 provide both high value foraging and potential breeding habitat, 31 trees provide potential breeding habitat only and another 38 trees provide high value foraging habitat only.

A total of 147 retained trees are high quality foraging habitat for both species (marri and wandoo), a further two trees (pine) are high foraging value for Carnaby's Black Cockatoo (*Zanda latirostris*) and a further four trees (sheoak) are high value foraging habitat for Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*). A total of 146 potential breeding trees will be retained within POS. One of them has a hollow of suitable size for black cockatoo breeding but is occupied by galahs (Attachment W - Figure 6 - Tree Retention). A total of 176 trees to be retained across the Site meet the definition of potential roosting habitat ('tall eucalypts'; Link #4 - (DAWE. (2022). Referral Guideline for 3 WA Threatened Black Cockatoo Species).

Mitigation

The proposed action seeks to enhance the habitat quality within the delineated Nambad Brook foreshore reserve. The reserve will be revegetated with species representative of the habitat present, such as *Corymbia calophylla*, *Eucalyptus wandoo* and *Eucalyptus rudis*. A Landscaping Plan (Attachment Z - Landscaping Plan and Nambad Revegetation Plan) has been developed that includes Black cockatoo foraging and breeding species. A more detailed landscaping and revegetation plan will be developed at a later development stage.

The proponent commits to the replacement of impacted trees at a 2:1 ratio across the development, within the POS and road reserves. Tree species will be selected based on their habitat value to Carnaby's Black Cockatoo (*Zanda latirostris*) and Forest Red-tailed Cockatoo (*Calyptorhynchus banksii naso*). In the areas of POS, tree plantings will comprise of species suitable for foraging, and future roosting and breeding

habitat (comprising species such as *Corymbia calophylla*, *Eucalyptus marginata* and *Eucalyptus todtiana*). Street tree plantings will seek to provide foraging habitat and may comprise a mix of endemic species (*C. calophylla*, *E. marginata*) and introduced species such as cape lilac (*Melia azedarach*).

Trees will be replaced at a 2:1 ratio in accordance with what is removed. If a greater number of trees can be avoided, this will be reflected in the replacement ratio. As the proposed action proposes to remove a maximum of 53 trees (with 36 having a DBH \geq 500 mm or \geq 300 mm for wandoo), 106 trees comprising suitable habitat for black cockatoos will be established across the development.

Attachment Q will not be made publicly available due to containing sensitive information. A redacted version of the document will be published.

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

No offsets are currently proposed, as the proposed action is not considered to comprise a controlled action or to result in any significant residual impacts.

4.1.5 Migratory Species

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

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

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

Direct impact	Indirect impact	Species	Common name
No	No	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	No	<i>Motacilla cinerea</i>	Grey Wagtail
No	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew

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

No

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

*

There are no migratory species with a high or medium likelihood to occur within the Site or surrounding area of 5 km.

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.

*

This is not a nuclear development.

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 Site is not located in a 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 Site is not located near 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 any large coal mining development or coal seam gas.

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 - PEARCE - AP11OBSTRUCTION BEACON NO.5
No	No	Defence - PEARCE - AP9 OBSTRUCTION BEACON NO.4

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 located 1.2 km from RAAF Pearce. The development Site sits outside the Aircraft Noise Exposure Forecast (ANEF) contour mapping for RAAF Pearce and as such has no impact on operations.

4.1.11 Commonwealth Heritage Places Overseas

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

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

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

—

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

No

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

*

The development Site is in Western Australia.

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

None

Conclusion on the likelihood of unlikely significant impacts

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

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

4.3 Alternatives

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

No

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

There is currently a housing shortage within Western Australia and Australia as a whole. The National Housing Accord has been proposed and includes an initial aspirational target agreed by all parties to build one million new well-located homes over 5 years from mid-2024. The Commonwealth and states and territories agreed to update this target at National Cabinet in August 2023 to 1.2 million new well-located homes over 5 years from mid-2024.

The Bullsbrook Townsite District Structure Plan (Bullsbrook DSP) (Attachment B - Bullsbrook DSP) was prepared under the provisions of the City of Swan's Local Planning Scheme and approved by the Western Australian Planning Commission in 2018. The Bullsbrook DSP provides guidance and advocacy for development of the townsite to 2031 and beyond. The Bullsbrook Townsite Land Use Master Plan (Attachment C - Bullsbrook Townsite Land Use Master Plan) intended to provide guidance for the future urban growth of the area to create a liveable town which is sustainable, vibrant and prosperous to meet the predicted growth in population of Perth's metropolitan area. The Bullsbrook South Urban Expansion Area (Attachment D - Figure 2 - Bullsbrook South Urban Expansion Area) has been proposed for residential development to support the establishment of the Bullsbrook Townsite.

The Bullsbrook South Urban Expansion Area is zoned Rural under the City of Swans Local Planning Scheme No 17 and as Urban deferred under the Metropolitan Region Scheme (MRS). The Urban Deferred zone was achieved in 2018, when the land was amended from Rural Zone (MRS 1323/41) (Attachment E - MRS Amendment 1323-41). An MRS Amendment is currently in progress and will facilitate future residential development, a neighbourhood centre, areas of public open space, a primary school and associated playing fields and conservation area to meet the targets of the National Housing Accord.

The concept plan for the development of Bullsbrook South Stage 1 had taken into consideration the provision of services, based on current availability and capacity to influence the layout and placement of the development and the conservation and retention of environmental values within the Site.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

Type	Name	Date	Sensitivity	Confidence
#1.	Document Attachment A - Figure 1 - Site Location.pdf Site location map	05/09/2024	No	High
#2.	Document Attachment B - Bullsbrook DSP.pdf District Structure Plan for Bullsbrook South	11/04/2018	No	High
#3.	Document			

	Attachment C - Bullsbrook Townsite Land Use Master Plan.pdf Land use master plan for Bullsbrook South	06/10/2016	No	High
#4.	Document Attachment D - Figure 2 - Bullsbrook South Urban Expansion Area.pdf Map of Bullsbrook South urban expansion area	17/09/2016	No	High
#5.	Document Attachment E - MRS Amendment 1323-41.pdf Metropolitan Regional Scheme Amendment documentation	01/03/2016	No	High
#6.	Document Attachment F - Water Corp Lifting Response_Redacted.pdf Correspondence from the Water Corporation on the MRS Amendment.	13/11/2016	Yes	High
#7.	Document Attachment F - Water Corp Lifting Response_Unredacted.pdf Correspondence from Water Corporation	03/05/2016	Yes	High
#8.	Document Attachment G - Water Corp Correspondence_Redacted.pdf Correspondence from Water Corporation	03/05/2016	Yes	High
#9.	Document Attachment G - Water Corp Correspondence_Unredacted.pdf Correspondence from Water Corporation	13/11/2016	Yes	High
#10.	Document Attachment H - Figure 3 - Vegetation Types.pdf Map of vegetation types on the Site	05/09/2016	No	High

1.2.5 Information about the staged development

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment B - Bullsbrook DSP.pdf District Structure Plan for Bullsbrook South	10/04/2016	No	High
#2.	Document	Attachment E - MRS Amendment 1323-41.pdf Metropolitan Regional Scheme Amendment documentation	28/02/2016	No	High
#3.	Document	Attachment F - Water Corp Lifting Response_Redacted.pdf Correspondence from the Water Corporation on the MRS Amendment.	12/11/2016	Yes	High
#4.	Document	Attachment G - Water Corp Correspondence_Redacted.pdf Correspondence from Water Corporation	02/05/2016	Yes	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document				

	Attachment I - MRS-1323-41- Submissions Report.pdf Submissions on MRS Amendment	01/08/2019	No	High
#2.	Document Attachment J - Heritage Survey_Redacted.pdf Heritage survey report	01/06/2024	Yes	High
#3.	Document Attachment J - Heritage Survey_Unredacted.pdf Heritage Survey Report	01/06/2024	Yes	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment K - Deed of Undertaking.pdf Signed deed of undertaking	25/02/2019	Yes	High
#2.	Document	Attachment L - Jane Brook EPBC Compliance.pdf Jane Brook Compliance	25/09/2019	Yes	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment M - Mirvac_TCE Strategy.pdf TCE Strategy	01/11/2022	No	High
#2.	Document	Attachment N - Mirvac_Planet Positive Water.pdf Planet Positive - Water	01/07/2023	No	High
#3.	Document	Attachment O - Mirvac_Planet Positive Waste.pdf Planet Positive - Waste	01/07/2023	No	High
#4.	Document	Attachment P - Mirvac_Carbon Report.pdf Carbon Report	01/07/2023	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment A - Figure 1 - Site Location.pdf Site location map	04/09/2024	No	High
#2.	Document	Attachment D - Figure 2 - Bullsbrook South Urban Expansion Area.pdf Map of Bullsbrook South urban expansion area	16/09/2024	No	High
#3.	Document	Attachment E - MRS Amendment 1323-41.pdf Metropolitan Regional Scheme Amendment documentation	28/02/2019	No	High
#4.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	20/12/2023	Yes	High
#5.	Document	Attachment R - Bullsbrook South EAR 2023 Part II_Redacted.pdf	20/12/2023	Yes	High

EAR for the Site				
#6.	Document	Attachment S - Bullsbrook South EAR 2023 Appendix A - E_Redacted.pdf EAR for the Site	20/12/2023	Yes High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#2.	Document	Attachment R - Bullsbrook South EAR 2023 Part II_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#3.	Document	Attachment S - Bullsbrook South EAR 2023 Appendix A - E_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#4.	Document	Attachment T - Figure 3 - Carnaby's Black Cockatoo Foraging Habitat.pdf Map showing Black Cockatoo foraging habitat	09/09/2024	No	High
#5.	Document	Attachment U - Figure 4 - Forest Red-tailed Black Cockatoo Foraging Habitat.pdf Map showing Black Cockatoo foraging habitat	09/09/2024	No	High
#6.	Document	Attachment V - Figure 5 - Black Cockatoo Potential Breeding Habitat.pdf Map showing Black Cockatoo breeding habitat	09/09/2024	No	High
#7.	Link	Australian Vegetation Attribute Manual Version 7.0 https://www.dcceew.gov.au/environment/land/publi..			High
#8.	Link	DCCEEW - Referral Guideline for 3 WA Threatened Black Cockatoo Species https://www.dcceew.gov.au/sites/default/files/do..			High
#9.	Link	Plants Used by Carnabys Black Cockatoo https://www.armadale.wa.gov.au/sites/default/fil..			High
#10.	Link	Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment H - Figure 3 - Vegetation Types.pdf Map of vegetation types on the Site	04/09/2024	No	High
#2.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment J - Heritage Survey_Redacted.pdf Heritage survey report	31/05/2024	Yes	High
#2.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#3.	Document	Attachment R - Bullsbrook South EAR 2023 Part II_Redacted.pdf EAR for the Site	19/12/2023	Yes	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Map Viewer https://map-viewer-plus.app.landgate.wa.gov.au/i..			High

4.1.2.2 (National Heritage) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment J - Heritage Survey_Redacted.pdf Heritage survey report	31/05/2024	Yes	High
#2.	Link	Aboriginal Cultural Heritage Enquiry System https://espatial.dplh.wa.gov.au/ACHIS/index.html..			High

4.1.2.6 (National Heritage) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment J - Heritage Survey_Redacted.pdf Heritage survey report	31/05/2024	Yes	High

4.1.2.9 (National Heritage) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment J - Heritage Survey_Redacted.pdf Heritage survey report	31/05/2024	Yes	High

4.1.2.10 (National Heritage) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment W - Figure 6 - Tree Retention.pdf Map showing tree retention on the Site	08/09/2024	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment R - Bullsbrook South EAR 2023 Part II_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#2.	Document	Attachment W - Figure 6 - Tree Retention.pdf Map showing tree retention on the Site	09/09/2024	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#2.	Document	Attachment X - Figure 7 - BC Foraging Habitat Extent 12 km Buffer.pdf Map showing black cockatoo foraging extent	09/09/2024	No	High
#3.	Document	Attachment Y - Figure 8 - Known BC Roosting and Breeding Sites 12 km Buffer.pdf Map showing black cockatoo potential breeding sites	09/09/2024	No	High
#4.	Link	DCCEEW - Referral Guideline for 3 WA Threatened Black Cockatoo Species https://www.dcceew.gov.au/sites/default/files/do..			High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment Q - Bullsbrook South EAR 2023 Part I_Redacted.pdf EAR for the Site	19/12/2023	Yes	High
#2.	Document				

	Attachment W - Figure 6 - Tree Retention.pdf Map showing tree retention on the Site	08/09/2024	No	High
#3.	Document Attachment Z - Lanscape and Nambad Brook Revegetation Plan.pdf Landscape and revegetation plan	23/08/2024	No	High
#4.	Link DCCEEW - Referral Guideline for 3 WA Threatened Black Cockatoo Species https://www.dcceew.gov.au/sites/default/files/do..			High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attachment B - Bullsbrook DSP.pdf District Structure Plan for Bullsbrook South	10/04/2018	No	High
#2.	Document	Attachment C - Bullsbrook Townsite Land Use Master Plan.pdf Land use master plan for Bullsbrook South	05/10/2018	No	High
#3.	Document	Attachment D - Figure 2 - Bullsbrook South Urban Expansion Area.pdf Map of Bullsbrook South urban expansion area	16/09/2024	No	High
#4.	Document	Attachment E - MRS Amendment 1323-41.pdf Metropolitan Regional Scheme Amendment documentation	28/02/2018	No	High

5.2 Declarations

☒ Completed Referring party's declaration

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

ABN/ACN	19652083013
Organisation name	WESTERN ENVIRONMENTAL APPROVALS PTY LTD
Organisation address	6005 WA
Representative's name	Penny Norman
Representative's job title	Senior Consultant
Phone	0439876301
Email	penny.n@westenv.com.au

Address

Unit 5, 162 Colin St, West Perth WA 6005

☒ 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, **Penny Norman of WESTERN ENVIRONMENTAL APPROVALS 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	81095901769
Organisation name	MIRVAC (WA) PTY LIMITED
Organisation address	6000 WA
Representative's name	Priya Correia
Representative's job title	Senior Development Manager
Phone	+61 8 9424 9806
Email	priya.correia@mirvac.com
Address	Level 39, 108 St Georges Terrace Perth WA 6000 Australia

☒ 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, **Priya Correia of MIRVAC (WA) PTY LIMITED**, 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, **Priya Correia of MIRVAC (WA) PTY LIMITED**, 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. *