Amana Living integrated care community development, Meadow Spring

Application Number: **03260** Commencement Date: **05/12/2025** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Amana Living integrated care community development, Meadow Spring

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 *

02/11/2026

1.1.4 Estimated end date *

27/12/2029

1.2 Proposed Action details

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

Amana Living proposes to develop Lot 21, Oakmont Avenue, Meadow Springs (the site), totalling 1.5 hectares (ha), for an Integrated Care Community (ICC). The ICC development focuses on the construction and operation of the following contemporary aged care built form elements (**Attachment 1, Appendix 1**):

- Independent Living Units
- Assisted Living Units
- Carparks
- Wellness Space
- Day Club

Currently, the site is undeveloped. It contains a continuous stand of Tuart trees with a weed-dominated understorey. The understorey is regularly slashed with maintained firebreaks along the property boundaries.

Immediately adjacent to the site is the Meadow Spring residential community, Meadow Springs Country Club Golf Course, and an existing Amana Living care facility (**Attachment1, Figure 1**).

The site is situated within the City of Mandurah, in the suburb of Meadow Springs, approximately 65 km south of the Perth CBD and 4.5 km north of the Mandurah CBD.

Lot 21 Oakmont Avenue, Meadow Springs, is subject to the following statutory land use zoning (**Attachment 1, Table 2**):

- 'Urban' under the Peel Region Scheme (PRS)
- 'Residential' City of Mandurah Local Planning Scheme (LPS).

The stated objective of the City of Mandurah's 'Residential' zone is to:

- Promote a high-quality residential environment by maintaining the quality and character of existing residential areas and providing for a range of residential densities and housing types throughout the City.

The Amana Living ICC proposal is consistent with existing PRS and the City of Mandurah's LPS land-use zoning and objectives.

Matters of National Significance (MNES) associated with the implementation of the Proposed Action (the Amana Living ICC development)

The proposed action involves (**Attachment 1**):

- Disturbance area 1.322 ha.
- Tuart Woodlands and Forests of the Swan Coastal Plain - Threatened Ecological Community (TEC) (**Attachment 1, Appendix 2**):
    - Clearing of up to 1.322 ha consisting of:
        - Open Forest of *Eucalyptus gomphocephala* (Tuart) over tall open scrub of *Spyridium globulosum* over grassland of **Ehrharta longiflora*, **Avena barbata* and herbland of **Oxalis pes-caprae* (**Attachment 2, Figure 4**).
    - The Open Forest of *Eucalyptus gomphocephala* consists of clusters of Tuart trees (46) within a cleared or weed-dominated understorey.
    - The vegetation condition recorded across is "Completely Degraded" (**Attachment 2, Figure 5**).
    - The clearing of up to 1.322 ha represents 2.6% of the 51 ha Tuart woodland TEC patch, substantially located within the Meadow Springs golf course.
- Three Threatened Black Cockatoo Species:
    - Nesting Habitat (**Attachment 3, Figure 2**):
        - Clearing of 34 potential nesting trees, including:
            - 4 class 4 hollows

        - 16 class 5 hollows
        - 14 Tuart trees with no current hollows.
    - Foraging Habitat (**Attachment 3, Figure 4**):
        - Baudin's cockatoo: 0.75 ha of unsuitable foraging habitat
        - Carnaby's cockatoo: 0.75 ha of unsuitable foraging habitat
        - Forest red-tailed black cockatoo: 0.75 ha of unsuitable foraging habitat

Avoidance and Mitigation Actions

The Amana Living Meadow Spring ICC concept design locates buildings and infrastructure to minimise the clearing impacts, specifically (**Attachment 1, Appendix 1**):

- Retaining a central corridor of 'High' retention value (nine Tuart trees in total) in an area of approximately 1,780 m2.
- Retaining 12 Tuart trees and potential nesting trees. The highest-ranked hollow trees were prioritised for retention. Specifically, the retained nesting trees include:
    - 1 class 3 hollow Tuart tree.
    - 2 class 4 hollow Tuart trees
    - 9 class 5 hollow Tuart trees.

The key mitigation actions include (**Attachment 1, Section 4**):

- The proposed action involves retaining 17 Tuart trees within the public realm, such as car parks and open spaces.
- Where avoidance measures cannot be implemented within the disturbance footprint based on the required works of the proposed action, any potential impacts to MNES will be mitigated and managed in accordance with standard best-practice construction management mitigation measures to be implemented to minimise the possible effects to fauna and vegetation. This includes the following mitigation actions:
    - Tree Assessment and Retention Management Plan (prepared and implemented by an arborist). This plan includes the following elements:
        - Informs all contractors regarding the 17 trees to be retained.
        - Defining the Tree Protection Zone (TPZ) and establishing the TPZ within the site.
        - Management actions and activities within the TPZ.
        - Compliance reporting.
    - Fauna Relocation Management Plan (prepared and implemented by an ecologist). This plan includes the following elements:
        - A review of the vertebrate fauna potentially occurring in the site.
        - Responsible ecologist implementing the fauna capture and relocation program.
        - Regulation 28 licence to take and relocate fauna requirement.
        - Management of the proposed clearing procedure.
        - Detail the proposed trapping methods, including the number and type of traps.
        - Reporting procedures.
    - Construction Environmental Management Plan (prepared and implemented by an environmental consultant). This plan includes the following elements:
        - Operational hours
        - Dust and noise management.
        - Pre-start civil contractor briefings to highlight no-go areas (i.e. avoidance areas and trees to be retained).
        - Demarcation of retained vegetation (i.e. around individual tree protection zones).
        - Directional clearing to encourage ground-dwelling and avian fauna dispersal.
        - Measures to reduce the risk of accidental bushfire ignition.
        - Stockpiling and removal of cleared vegetation.

- Accidental spill management

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

No

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

Commonwealth
The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) protects listed MNES, and it is an offence to implement any action that would have or is likely to have a significant impact on any MNES. If a proponent believes their proposed action (i.e., the proposal) is likely to have a significant impact on any MNES, they are obliged to refer the proposal to the Minister through the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Three nationally significant fauna species and an ecological community were identified as occurring within the site, Lot 21, Oakmont Avenue. On that basis, the following policies and guidance documents have been considered in this referral:

- Significant Impact Guidelines 1.1 (DoE 2013)
- Carnaby's Cockatoo (*Calyptorhynchus latirostris)* Recovery Plan (DPaW 2013)
- Referral Guideline for 3 WA Threatened Black Cockatoo Species (DAWE 2022)
- EPBC Referral Guidance Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community (DoEE 2019).

Western Australia

Western Australian State Legislation, planning policies and guidance relevant to the project include:

- *Environmental Protection Act 1986* (EP Act)
  - Relevant as it is the overarching environmental legislation in Western Australia
- *Biodiversity Conservation Act 2016* (BC Act)
  - Relevant due to the listing of species and ecological communities in Western Australia, e.g., Tuart Woodlands are listed as a priority ecological community (P3).
- *Planning and Development Act 2005* (PD Act)
  - The PD Act provides the framework for land use, making tree protection a key part of sustainable development, with local councils creating specific Local Planning Policies for tree retention and requiring development approval for clearing activities.

Local Policies and Guidelines (City of Mandurah)

- Local Planning Strategy and Local Planning Scheme 12
  - The site is situated within a 'Tree Preservation Area' defined in the City's Local Planning Scheme 12. Accordingly, the City of Mandurah is responsible for the assessment and approval of a 'Development Approval' before any clearing and construction activities are undertaken within the site. The 'Development Approval' will be subject to specific conditions, including Tree Assessment and Retention Management Plan and Fauna Relocation Management Plan.

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

Amana Living met with the City of Mandurah in early 2025 to review their Meadow Springs ICC proposal, outline the planning approval process, and discuss future engagement with the surrounding Meadow Springs residents. No objection to the proposed Meadow Springs ICC development was raised. The City was aware of the current and growing demand for aged care facilities across the Peel region.

Ongoing consultation with the City of Mandurah and the Meadow Springs residents will continue through the lodgment and advertisement of the ICC development proposal 'Development Application'.

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.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	32655914015
Organisation name	PENTIUM WATER PTY LTD
Organisation address	6005 WA

Referring party details

Name	John Halleen
Job title	Environmental Planner
Phone	08 6182 1790
Email	jhalleen@pentiumwater.com.au
Address	Level 1, 640 Murray Street, 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	45582438433
Organisation name	AMANA LIVING INCORPORATED
Organisation address	6008 WA

Person proposing to take the action details

Name	Rita Sheridan
Job title	Chief Property and Retirement Living Officer
Phone	+61 400 136 892
Email	rsheridan@amanaliving.com.au
Address	541 Hay Street, Subiaco, WA 6008

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. *

Amana Living is a not-for-profit organisation established by the Anglican Church in 1962. Amana Living operates 13 nursing homes, 17 retirement villages, two transition care facilities, six day clubs and one of WA's most extensive home care services.

Amana Living has a satisfactory track record of responsible environmental management, including the implementation of sustainability measures such as carbon footprint assessment and reduction (e.g., installing solar panels and using electric vehicles), waste minimisation, and sustainable sourcing.

Amana Living has no past or present proceedings under Commonwealth or State environmental laws.

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

Amana Living does not have a formal "corporate environmental policy" document, but it has a strong commitment to environmental performance and sustainability. Amana Living's environmental and sustainability approach is integrated into its business operations through practical actions.

Key aspects of Amana Living's environmental approach include:

- Carbon Footprint Assessment: Amana Living developed an internal model to assess and track energy usage and carbon emissions across its Western Australia sites, aiming to reduce waste and improve environmental performance.
- Waste and Resource Minimisation: Minimise waste and conserve resources such as water, energy, oils, chemicals, dyes, and paper in their operations and supply chains.
- Sustainable Sourcing: Amana Living associates with suppliers dedicated to eco-responsibility and encourages the use of environmentally friendly packaging materials where practicable in their terms and conditions.
- Infrastructure and Technology: Amana Living invest in internal environmental practices and technologies like renewable energy, waste reduction, and the use of environmental sensors in their facilities to promote safety and efficiency.
- Governance and Reporting: Amana Living integrates environmental requirements into their general business operations, with their board actively involved in sustainability initiatives, as evidenced by board members' experience in renewable energy.

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	45582438433
Organisation name	AMANA LIVING INCORPORATED
Organisation address	6008 WA

Proposed designated proponent details

Name	Rita Sheridan
Job title	Chief Property and Retirement Living Officer
Phone	+61 400 136 892
Email	rsheridan@amanaliving.com.au
Address	541 Hay Street, Subiaco, WA 6008

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	32655914015
Organisation name	PENTIUM WATER PTY LTD
Organisation address	6005 WA
Representative's name	John Halleen
Representative's job title	Environmental Planner
Phone	08 6182 1790
Email	jhalleen@pentiumwater.com.au
Address	Level 1, 640 Murray Street, 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	45582438433
Organisation name	AMANA LIVING INCORPORATED
Organisation address	6008 WA
Representative's name	Rita Sheridan
Representative's job title	Chief Property and Retirement Living Officer
Phone	+61 400 136 892
Email	rsheridan@amanaliving.com.au
Address	541 Hay Street, Subiaco, WA 6008

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

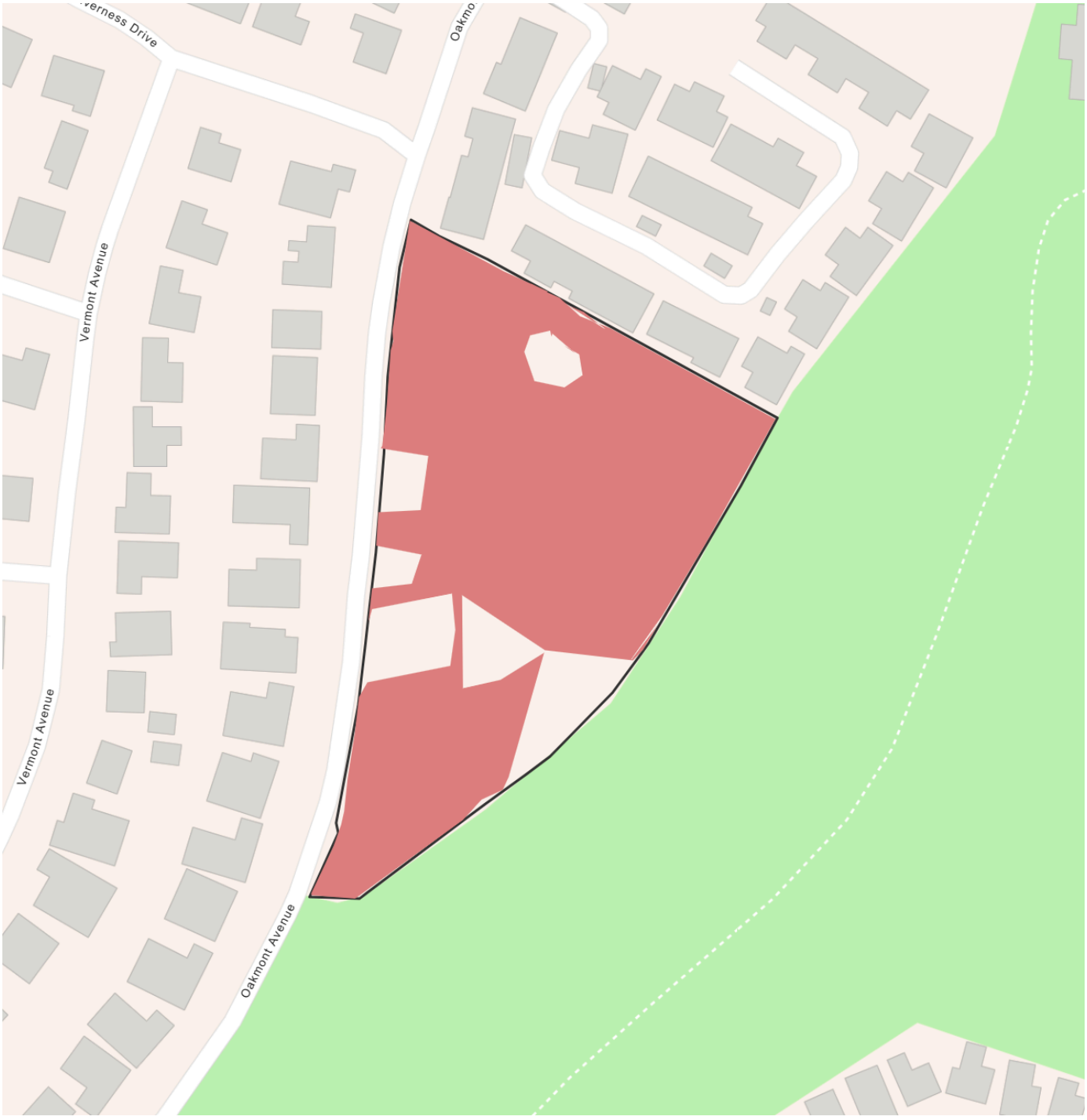
1.4 Payment details: Payment allocation

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

Proposed designated proponent

2. Location

2.1 Project footprint



Project Area: 1.54 Ha **Disturbance Footprint:** 1.30 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Lot 21 (43) Oakmont Avenue Meadow Springs, WA 6210

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 21 (43) Oakmont Avenue, Meadow Springs, is owned by Amana Living 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 1.5 ha in area. It is located within the City of Mandurah. The site is zoned 'Urban' under the Peel Region Scheme (PRS) and 'Residential' under the City of Mandurah Local Planning Scheme (LPS) 12. The site has the necessary land-use zoning under the MRS and the City of Mandurah LPS 12 to support the broad range of seniors' accommodation and associated facilities proposed in the Amana Living Meadow Springs ICC development (**Attachment 1, Table 2**).

Currently, the site is undeveloped. It contains regrowth stands of Tuart trees and a weed-dominated understorey, regularly slashed and maintained with firebreaks. The one vegetation community represented on the site was "Open forest of *Eucalyptus gomphocephala* over tall, open scrub of *Spyridium globulosum*, above grassland of *Ehrharta longiflora, *Avena barbata, and herbland of *Oxalis pes-caprae" (**Attachment 2, Figure 4; Table 10**). The vegetation condition recorded across the site was "Completely Degraded" (**Attachment 2, Figure 5**).

Immediately adjacent to the site is the Meadow Spring residential community, Meadow Springs Golf Course, and an existing Amana Living care facility (Meadow Springs Village) (**Attachment 1, Figure 1; Figure 3**).

Within the site, the following ecological values are present:

- Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain, which is listed as 'critically endangered' under the EPBC Act.
    - The mapped Tuart woodland TEC area within the site totalled 1.5 ha and was assessed in 'Moderate' condition (**Attachment 2, Section 6**).
    - An assessment of the native vegetation within the adjacent golf course (i.e., within 30 m of the site) confirms that the Tuart woodland TEC patch extends beyond the site into the golf course. The assessment concluded that the Tuart woodland TEC is highly likely to apply to the 51 ha of native vegetation within the golf course (adjacent to the managed fairways), either as a continuous patch or as a series of patches (**Attachment 1, Appendix 2**).
- Three threatened black cockatoo species (**Attachment 3**):
    - Foraging habitat (**Attachment 3, Figure 4**):
        - A breakdown of the foraging habitat areas of three threatened black cockatoo species is presented below:
            - Baudin's cockatoo: 0.75 ha of unsuitable foraging habitat
            - Carnaby's cockatoo: 0.75 ha of unsuitable foraging habitat
            - Forest red-tailed black cockatoo: 0.75 ha of unsuitable foraging habitat
        - Regionally, the foraging vegetation within the site represents 0.008% of the estimated regional habitat extent.
    - Nesting habitat (**Attachment 3, Figure 2**):
        - No active nesting trees within the site.
        - A single large (130 cm DBH) dead tuart contains three hollows that could be suitable for black cockatoo nesting and was assigned the rank of a Class 3 nesting tree.
        - Six trees were assigned a rank of Class 4 nesting tree and do not currently show any possibility of breeding for the black cockatoo species.
        - Twenty-five trees were assigned a rank of Class 5.
        - Fourteen trees currently do not have a suitable DBH to qualify as black cockatoo nesting trees; however, they could potentially grow into suitable nesting trees.

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

The Amana Living Meadow Springs ICC facility meets a key regional need by addressing the changing demographics of the region's aging population. It directly responds to the Peel region's aging population and, importantly, supports the needed upgrade to Amana Living's existing Mandurah ICC facility (**Attachment 1, Section 1.2**).

The Meadow Springs ICC development concept design concurrently addresses the requirements of a contemporary multifaceted aged care facility (i.e., independent living units, assisted living, day club) and the retention of Tuart woodland TEC and threatened black cockatoo nesting habitat within a comparatively small 1.5 ha site (**Attachment 1, Appendix 1**).

The Meadow Spring ICC development adopts the following avoidance measures (**Attachment 1, Section 4**):

- The retention of 12 mature tuart trees. The retained trees include a single class 3 and two class 4 nesting hollows, as well as nine class 5 nesting hollows.
- 1,780m2 of Tuart woodland TEC area.

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

Historically, the native vegetation in the survey area has been extensively cleared to accommodate the activities associated with the golf course, road infrastructure and residential properties. In addition, the site is subject to regular maintenance, including slashing of the understorey, to minimise bushfire risks to the adjacent residential area (**Attachment 1, Table 2**).

The site's natural features are limited to the mature stands of Tuart trees. The 1.5 ha Tuart woodland area within the site is located within 30 m of the larger Tuart woodland area associated with a 51 ha native vegetation area within the golf course. The results of the Tuart woodland TEC assessment within and surrounding the site, using a phased approach and the approved conservation advice for the Tuart woodland TEC, drew the following conclusions (**Attachment 1, Appendix 2**):

- General observations and recordings:
    - The native vegetation within the golf course is located in an appropriate bioregion and landform that would support a Tuart woodland TEC.
- The assessment of the nine sites across the 51-ha native vegetation area within the golf course confirmed (**Attachment 1, Appendix 2**):
    - The vegetation structure was variable, depending on whether the area was historically cleared and on the application of golf course management practices across the nine sites. The vegetation structure ranged from:
        - Areas of woodland (generally where a higher density of native understorey occurs)
        - Open woodland structure was the dominant structure.
    - The Tuart trees observed at the nine sites were between 30 m and 60 m from other observed Tuart trees. In places, the Tuart trees were separated by paths, fire breaks and a golf fairway.
    - There was spatial variation in native plant species numbers and density. However, at each of the nine sites, when the search expanded across a 30 m area, more than four native species were observed in the understorey beneath the Tuarts.
    - The recorded native species is consistent with the historical 1996 flora, vegetation, and fauna assessment of the Meadow Springs estate (**Attachment 1, Appendix 2**), which surveyed and recorded a vegetation community consisting of an ‘open Tuart woodland on dunes and swales’ immediately adjacent to the golf fairways.
    - In summary, each of the nine sites would satisfy the key diagnostic characteristics of the Tuart woodland ecological community. Further, the Tuart woodland patch within the site would be extended to greater than 5 ha. Therefore, the Tuart woodland within the site would not be subject to condition thresholds.
    - The full extent of the Tuart woodland TEC contiguous patch within the golf course’s 51-ha native vegetation area was not subject to a detailed survey and therefore formally confirmed. The site evidence, supported by the 1996 vegetation survey of the Meadow Springs golf course, concludes that the continuous stands of Tuart across the entire 51 ha area would likely meet the Commonwealth's Tuart Woodlands and Forests ecological community description and key diagnostics per the approved Conservation Advice.
    - The Tuart woodland within the 51 ha golf course area may consist of a single Tuart woodland TEC patch or comprise several Tuart woodland patches (**Attachment 1, Section 5.3; Table 11**).
- Focused assessment of the 3.5 ha area within the golf course (**Attachment 1, Section 3.4.2; Table 6; Appendix 2**):
    - The assessment of the approximately 3.5 ha area of the golf course adjacent to the site confirmed the presence of more than seven native understorey species.
    - The Tuart woodland in this part of the golf course area meets the TEC criteria for Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain.
    - The condition of the golf course, Tuart woodland TEC patch ranges from ‘Poor’ to ‘Moderate’ with areas of ‘High’ depending on the Tuart tree location within the golf course and the level of management applied.

    - This 3.5 ha area is viewed as a typical section of the broader 51 ha native vegetation area within the golf course.
- Golf course management:
    - Continuous seasonal native understorey slashing of the understorey, to minimise fire risks, will continue to maintain the understorey vegetation in a modified ‘Completely Degraded’ to ‘Degraded’ condition.

Summary (**Attachment 1, Appendix 2**)

- The 1.5 ha Tuart woodland TEC in ’moderate’ condition within the site would not meet the size and condition thresholds defined in the Tuart woodland TEC criteria independently. The substantial evidence documented across the nine sites (within the broader 51 ha golf course area) and the 3.5-ha area within the golf course immediately adjacent to the site confirmed:
    - A contiguous stand of Tuart trees adjacent to the site and across the 51 ha native vegetation area adjacent to the golf course’s fairways.
    - Applying the precautionary principle, the following Tuart woodland TEC assumptions were adopted:
        - The Tuart woodland TEC within the site forms part of a significantly larger Tuart woodland TEC patch associated with the golf course.
        - This TEC woodland patch extends across the entire 51 ha of native vegetation.

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

The site is relatively flat. The site topography ranges from 8 m Australian Height Datum (mAHD) along the northern boundary to 5 m AHD along the southern and western boundaries (**Attachment 1, Figure 3**).

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.

- Vegetation and Flora
    - The following flora, vegetation and fauna surveys were completed within the LSP 1 area per the Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (**Attachment 2**):
        - Detailed Flora and Vegetation Survey – Lot 21 Oakmont Avenue, Meadow Springs, Mandurah.
    - The one vegetation community represented on the site was “Open forest of *Eucalyptus gomphocephala* over tall, open scrub of Spyridium globulosum, above grassland of **Ehrharta longiflora*, **Avena barbata*, and herbland of **Oxalis pes-caprae*” (**Attachment 2, Table 10**)
    - The vegetation condition recorded across the site was “Completely Degraded” (**Attachment 2, Figure 5**).
    - The site is infested with weed species, mainly grasses, daisies, and pea species. A total of 37 taxa, comprising 19 families and 34 genera, were recorded (**Attachment 2, Section 5**).
    - Introduced weed species represent 67.5% of the total number of flora species recorded. One species recorded onsite (**Asparagus asparagoides*) is listed as a Weed of National Significance (WoNS) (**Attachment 2, Table 8**).
    - No threatened or priority flora species were recorded within the site, and none are considered likely to occur.
- Tuart Woodland TEC
    - The botanical assessment confirms the presence of the following threatened ecological community (TEC) in ‘Moderate’ condition (**Attachment 2, Section 6**):
        - Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain, which is listed as ‘critically endangered’ under the EPBC Act.
        - The mapped Tuart woodland TEC area was 1.5 ha.
        - The 1.5 ha Tuart woodland TEC in ’moderate’ condition within the site would not meet the size and condition thresholds defined in the Tuart woodland TEC criteria independently. A comprehensive evaluation of the entire 51-hectare native vegetation area was not achievable. Nonetheless, substantial evidence documented at the nine sites and the 3.5-hectare area adjacent to Lot 21 Oakmont Avenue substantiates that the Tuarts within the golf course area meet the Tuart woodland threatened ecological community criteria (**Attachment 1, Appendix 2**).
        - Applying the precautionary principle, the following Tuart woodland TEC assumptions were adopted (**Attachment 1, Table 5; Section 3.4; Section 5.3**):
            - The Tuart woodland TEC within the site forms part of a significantly larger Tuart woodland TEC patch associated with the golf course.
            - This TEC woodland patch extends across the entire 51 ha of native vegetation.
- Threatened Black Cockatoo Species:
    - The following threatened black cockatoo survey was completed across the site per the Referral guideline for 3 WA threatened black cockatoo species:
        - Lot 21 Oakmont Avenue, Meadow Springs, Black Cockatoo Habitat Assessment (**Attachment 3**).
    - The site falls within the modelled distribution of Carnaby’s cockatoo, Forest red-tailed black cockatoo, and likely within the modelled distribution of the Baudin’s cockatoo (**Attachment 3**).
    - The site contains the following three habitat types (**Attachment 3; Table 4; Figure 3**):
        - Tuart Grove
        - Mixed Shrubland
        - Bare Ground
    - The threatened black cockatoo foraging habitat within the site consists of 0.75 ha of unsuitable foraging habitat (**Attachment 3, Table 6; Figure 4**).
    - No active nesting trees within the site.

- A single large (130 cm DBH) dead tuart contains three hollows that could be suitable for black cockatoo nesting and was assigned the rank of a Class 3 nesting tree (**Attachment 3, Table 3; Figure 2**).
- Six trees were assigned a rank of Class 4 nesting tree and do not currently show any possibility of breeding for the black cockatoo species (**Attachment 3, Table 3; Figure 2**).
- Twenty-five trees were assigned a rank of Class 5 (**Attachment 3, Table 3; Figure 2**).
- Fourteen trees currently do not have a suitable DBH to qualify as black cockatoo nesting trees; however, they could potentially grow into suitable nesting trees (**Attachment 3, Table 3; Figure 2**).

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

Soils

- The site is located within the Spearwood Soil System. This system comprises sand dunes and plains overlayed with deep yellow or pale sands. Tuarts are known to occur on the calcareous soils of the Spearwood dune systems (**Attachment 1, Figure 3; Attachment 2, Section 2.1**).

Pre-European Vegetation

- The regional vegetation mapping identifies the site as originally forming part of the Cottesloe Complex - Central and South, which is described as a mosaic of woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *Eucalyptus gomphocephala* (Tuart) – *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) with closed heath on the limestone outcrops (**Attachment 2, Section 2.2.1**).
- Approximately 32% of the original extent of the Cottesloe Complex-Central remains within the Swan Coastal Plain bioregion.

Vegetation Complex

- The one vegetation community represented on the site was “Open forest of *Eucalyptus gomphocephala* over tall, open scrub of Spyridium globulosum, above grassland of **Ehrharta longiflora*, **Avena barbata*, and herbland of **Oxalis pes-caprae*” (**Attachment 2, Table 10**)
- The vegetation condition recorded across the site was “Completely Degraded” (**Attachment 2, Figure 5**).
- The site is infested with weed species, mainly grasses, daisies, and pea species. A total of 37 taxa, comprising 19 families and 34 genera, were recorded (**Attachment 2, Table 8**).
- Introduced weed species represent 67.5% of the total number of flora species recorded. One species recorded onsite (**Asparagus asparagoides*) is listed as a Weed of National Significance (WoNS) (**Attachment 2, Section 5**).
- No threatened or priority flora species were recorded within the site, and none are considered likely to occur.

Tuart Woodland TEC

- The detailed vegetation and flora assessment confirms the presence of the following threatened ecological community in ‘Moderate’ condition:
    - Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain, which is listed as ‘critically endangered’ under the EPBC Act.
    - The mapped Tuart woodland TEC area was 1.5 ha (**Attachment 2, Figure 4**).
- The assessment of the nine sites across the 51-ha native vegetation area within the golf course confirmed (**Attachment 1, Section 5.3; Appendix 2**):
    - The vegetation structure was variable, depending on whether the area was historically cleared and on the application of golf course management practices across the nine sites. The vegetation structure ranged from:
        - Areas of woodland (generally where a higher density of native understorey occurs)
        - Open woodland structure was the dominant structure.
    - The Tuart trees observed at the nine sites were between 30 m and 60 m from other observed Tuart trees. In places, the Tuart trees were separated by paths, fire breaks and a golf fairway.
    - There was spatial variation in native plant species numbers and density. However, at each of the nine sites, when the search expanded across a 30 m area, more than four native species were observed in the understorey beneath the Tuarts.
    - The recorded native species is consistent with the historical 1996 flora, vegetation, and fauna assessment of the Meadow Springs estate (**Attachment 1, Appendix 2**), which recorded the vegetation community, open Tuart woodland on dunes and swales immediately adjacent to the golf fairways.

    - In summary, each of the nine sites would satisfy the key diagnostic characteristics of the Tuart Woodland Ecological Community. Further, the Tuart woodland patch site would be greater than 5 ha in area, and therefore not subject to condition thresholds (**Attachment 1, Section 5.3**).
- The focused assessment of the 3.5 ha area within the golf course drew the following conclusions (**Attachment 1, Section 3.4; Section 5.3**):
    - The assessment of the approximately 3.5 ha area of the golf course adjacent to the site confirmed the presence of more than seven native understorey species.
    - The Tuart woodland in this part of the golf course area meets the TEC criteria for Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain.
    - The condition of the golf course, Tuart woodland TEC patch, would range from 'Poor' to 'Moderate' with areas of 'High'.
    - This 3.5 ha area is viewed as a typical section of the broader 51 ha native vegetation area within the golf course.
- The 1.5 ha Tuart woodland TEC in 'moderate' condition within the site would not meet the size and condition thresholds defined in the Tuart woodland TEC criteria independently (**Attachment 2, Section 6**).
- A comprehensive evaluation of the entire 51-hectare native vegetation area was not achievable. Nonetheless, substantial evidence documented at the nine sites and the 3.5-hectare area adjacent to Lot 21 Oakmont Avenue, substantiates that the Tuarts within the golf course would likely meet the Tuart woodland threatened ecological community criteria.
- Applying the precautionary principle, the following Tuart woodland TEC assumptions were adopted (**Attachment 1, Section 4; Section 5**):
    - The Tuart woodland TEC within the site forms part of a significantly larger Tuart woodland TEC patch associated with the golf course.
    - This TEC woodland patch extends across the entire 51 ha of native vegetation.

References

1. Beard, J. S., Beeston, G. R., Harvey, J. M., Hopkins, A. J. M., & Shepherd, D. P. (2013). The vegetation of Western Australia at the 1:3,000,000 scale. Explanatory memoir. Second edition. Conservation Science Western Australia, 9, 1–152.
2. Department of Environment and Energy (2019). Approved Conservation Advice (incorporating listing advice) for the Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain ecological community, Canberra.
3. Del Botanics Environmental Consulting (2025). Detailed Flora and Vegetation Survey Lot 21 Oakmont Avenue, Meadow Springs, Mandurah. Report prepared for Western Environmental.
4. Goble-Garratt & Ninox Wildlife Consulting (1996). Flora, Vegetation and Fauna Survey, Meadow Springs Estate. Unpublished report prepared for Quilty Environmental.
5. Heddle, E.M., Loneragan, O.W. and Havel, J.J. (1980). *Darling Systems – Vegetation Complexes*. In: Atlas of Natural Resources Darling System, Western Australia. Department of Conservation and Environment, Perth.
6. Western Environmental (2025). Lot 21 Oakmont Avenue, Meadow Springs, Black Cockatoo Habitat Assessment. Report prepared for Amana Living.

3.3 Heritage

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

There are no Commonwealth heritage places overseas or other Commonwealth heritage places within the site.

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

The DPLH Aboriginal Cultural Heritage (ACH) Inquiry System does not identify any registered or other heritage sites within the project area.

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. *

Regional mapping by the DWER indicates that the maximum groundwater level within the site ranges from approximately 3.5 to 5.0 m AHD, with groundwater flowing westward toward the Indian Ocean.

4. Impacts and mitigation

4.1 Impact details

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

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

4.1.1 World Heritage

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

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

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

—

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

No

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

No World Heritage properties are located within or in proximity to 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? *

No

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

No National Heritage places are located within or adjacent to the site.

4.1.3 Ramsar Wetland

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

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

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

Direct impact	Indirect impact	Ramsar wetland
No	No	Peel-Yalgorup System

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

No

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

The site is located approximately 4.2 kilometres north of the Peel-Yalgorup Ramsar site.

The site is not hydrologically connected to the Peel-Yalgorup Ramsar site. Groundwater within the superficial aquifer flows towards the coast (west).

The site is separated from the Peel-Yalgorup Ramsar site by the existing Meadow Springs residential area, the commercial and residential development within the City of Mandurah.

No impacts to the Peel-Yalgorup Ramsar wetland are predicted.

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	Andersonia gracilis	Slender Andersonia
No	No	Anous tenuirostris melanops	Australian Lesser Noddy
No	No	Ardenna grisea	Sooty Shearwater
No	No	Balaenoptera musculus	Blue Whale
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Caladenia huegelii	King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris canutus	Red Knot, Knot
No	No	Calidris ferruginea	Curlew Sandpiper
Yes	Yes	Calyptorhynchus banksii naso	Forest Red-tailed Black-Cockatoo, Karrak
No	No	Carcharias taurus (west coast population)	Grey Nurse Shark (west coast population)
No	No	Carcharodon carcharias	White Shark, Great White Shark
No	No	Caretta caretta	Loggerhead Turtle
No	No	Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
No	No	Chelonia mydas	Green Turtle
No	No	Dasyurus geoffroii	Chuditch, Western Quoll
No	No	Dermochelys coriacea	Leatherback Turtle, Leathery Turtle, Luth
No	No	Diomedea amsterdamensis	Amsterdam Albatross
No	No	Diomedea dabbenena	Tristan Albatross
No	No	Diomedea epomophora	Southern Royal Albatross

Direct impact	Indirect impact	Species	Common name
No	No	Diomedea exulans	Wandering Albatross
No	No	Diomedea sanfordi	Northern Royal Albatross
No	No	Diuris drummondii	Tall Donkey Orchid
No	No	Diuris micrantha	Dwarf Bee-orchid
No	No	Diuris purdiei	Purdie's Donkey-orchid
No	No	Drakaea elastica	Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid
No	No	Drakaea micrantha	Dwarf Hammer-orchid
No	No	Eubalaena australis	Southern Right Whale
No	No	Leipoa ocellata	Malleefowl
No	No	Limosa lapponica menzbieri	Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit
No	No	Macronectes giganteus	Southern Giant-Petrel, Southern Giant Petrel
No	No	Macronectes halli	Northern Giant Petrel
No	No	Natator depressus	Flatback Turtle
No	No	Neophoca cinerea	Australian Sea-lion, Australian Sea Lion
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Pachyptila turtur subantarctica	Fairy Prion (southern)
No	No	Phaethon rubricauda westralis	Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird
No	No	Phoebetria fusca	Sooty Albatross
No	No	Pristis pristis	Largetooth Sawfish, Freshwater Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish
No	No	Pseudocheirus occidentalis	Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit
No	No	Rhincodon typus	Whale Shark
No	No	Rostratula australis	Australian Painted Snipe

Direct impact	Indirect impact	Species	Common name
No	No	Sphyrna lewini	Scalloped Hammerhead
No	No	Sternula albifrons	Little Tern
No	No	Sternula nereis nereis	Australian Fairy Tern
No	No	Thalassarche carteri	Indian Yellow-nosed Albatross
No	No	Thalassarche cauta	Shy Albatross
No	No	Thalassarche impavida	Campbell Albatross, Campbell Black-browed Albatross
No	No	Thalassarche melanophris	Black-browed Albatross
No	No	Thalassarche steadi	White-capped Albatross
No	No	Tringa nebularia	Common Greenshank, Greenshank
Yes	Yes	Zanda baudinii	Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo
Yes	Yes	Zanda latirostris	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	Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion
Yes	No	Tuart (Eucalyptus gomphocephala) 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. *

The proposed action (i.e., clearing of Tuart trees for the purpose of constructing and operating the Meadow Springs ICC facility) has a disturbance footprint of approximately 1.322 ha (**Attachment 1, Table 1**).

The vegetation within the site was surveyed as 'Completely Degraded' with high weed loads (**Attachment 2, Figure 5**). Due to the highly modified nature of the site and the notable fragmentation and small size of vegetation patches, vegetation is unlikely to provide suitable habitat for mammals and medium- to large-sized reptiles. Further, no threatened flora species were identified during the detailed survey of the site.

The environmental values of the project area are detailed in sections 3.1-3.4 of this referral.

Threatened Black Cockatoo Species

- The site contains limited nesting and foraging habitat for the following three threatened black cockatoo species (**Attachment 3, Figure 2; Figure 4**) :
    - *Zanda latirostris* (Carnaby's cockatoo) is listed as 'endangered' under the EPBC Act and the BC Act.
    - *Zanda baudinii* (Baudin's cockatoo) is listed as 'endangered' under the EPBC Act and the BC Act.
    - *Calyptorhynchus banksii naso* (Forest red-tailed black cockatoo) is listed as 'vulnerable' under the EPBC Act and the BC Act.
- Potential impacts to nesting trees:
    - Clearing of 34 potential nesting trees, including:
        - 4 class 4 hollows
        - 16 class 5 hollows
        - 14 Tuart trees with no current hollows
- Foraging Habitat (**Attachment 3, Figure 4**):
    - The site contains 0.75 ha of unsuitable foraging habitat for the three threatened black cockatoo species.
- Potential Indirect Impacts:
    - Machinery, noise, dust and disease are considered temporary potential impacts as they are only likely to become an issue during construction (and can be mitigated).

Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community – Threatened Ecological Community (Tuart woodland TEC)

- Clearing of up to 1.322 ha consisting of:
    - Open Forest of *Eucalyptus gomphocephala* (Tuart) over tall open scrub of *Spyridium globulosum* over grassland of **Ehrharta longiflora*, **Avena barbata* and herbland of **Oxalis pes-caprae* (**Attachment 2, Table 10**).
- The Open Forest of *Eucalyptus gomphocephala* consists of clusters of Tuart trees (46) within a cleared or weed-dominated understorey.
- The Tuart woodland TEC within the site was assessed as 'Moderate' condition (**Attachment 2, Section 6**).
- The vegetation condition recorded across is "Completely Degraded" (**Attachment 2, Figure 5**).
- The clearing of up to 1.322 ha represents 2.6% of the 51 ha Tuart woodland TEC patch, substantially located within the Meadow Springs golf course, adjacent to the golf fairways (**Attachment 1, Section 6**).

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. *

Three Threatened Black Cockatoo Species

The site is within the modelled distribution and breeding range of the Carnaby's cockatoo and the Forest red-tailed black cockatoo, and the modelled likely presence distribution of the Baudin's cockatoo (**Attachment 3**).

- Foraging Habitat (**Attachment 3, Table 5; Figure 4**)
    - The extent of impact on foraging habitat (i.e. 0.75 ha of non-suitable foraging habitat) for the three black cockatoo species is not considered a Significant Impact per the MNES - Significant Impact Guidelines 1.1 (DotE 2013). The loss of 0.75 ha of unsuitable foraging habitat within the site would not be significantly relied upon to support any potential nearby breeding individuals.
    - Within a 12 km radius of the site, there are 9,225.76 ha of remnant native vegetation. It is expected that the majority of this vegetation would provide suitable foraging, roosting, and nesting habitat at levels equal to or greater than those present within the site. The habitat within the site represents 0.008% of the estimated regionally available threatened back cockatoo habitat (**Attachment 3, Figure 5**).
- Nesting Habitat (**Attachment 3, Figure 2; Table 3**)
    - The implementation of the Meadow Springs ICC will result in the clearing of 34 potential nesting trees, including 4 class 4 hollows, 16 class 5 hollows, and 14 Tuart trees with no current hollows.
    - There is no evidence of use by the three black cockatoo species, i.e., scat marking, branch clipping or feather dropping of the Tuart trees. There is no evidence that the trees have been historically used for breeding by black cockatoos.
    - The level of black cockatoo usage of the site is likely to be transitionary, with the surrounding area (12 km radius) offering suitable foraging and nesting habitat (9,225.76 ha) for Carnaby's cockatoo, Baudin's cockatoo, and Forest red-tailed black cockatoo.
- The Meadow Springs ICC masterplan retains (**Attachment 1, Appendix 1**):
    - A central corridor of 'High' retention value (nine Tuart trees in total) in an area of approximately 1,780 m2. An additional three trees are retained along the western and northern boundaries.
    - Twelve of the surveyed 46 potential back cockatoo nesting trees are proposed to be retained. The highest-ranked hollow trees were prioritised for retention, including the Class 3 hollow tree and 2 of the Class 4 hollow trees.

Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community – Threatened Ecological Community (Tuart woodland TEC)

- The clearing actions required to construct the Meadow Spring ICC development will result in the loss of 1.322 ha of the Tuart woodland TEC. The Tuart woodland TEC within the site was assessed in 'Moderate' condition (**Attachment 2, Section 6**).
- The Tuart woodland assessment of the adjacent golf course identified that the Tuart woodland within the site forms part of a larger estimated 51 ha Tuart woodland TEC area associated with the native vegetation within the golf course adjacent to the fairways (**Attachment 1, Appendix 2**).
- The proposed clearing of up to 1.322 ha of the Tuart woodland TEC area represents 2.6% of the larger Tuart Woodland TEC patch associated with the golf course (**Attachment 1, Section 5.3**).
- DBCA mapped extent of the Tuart woodland TEC within 8 km of the site is approximately 600 ha (**Attachment 1, Figure 5**). The proposed removal of up to 1.322 ha of the Tuart woodland TEC area accounts for 0.22% of the DBCA-mapped Tuart Woodland TEC within 8 km of the site.
- No impacts to the Tuart woodland TEC area or to potential nesting habitat within the adjacent golf course are predicted.

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

No

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

- The site contains low foraging habitat scores for all three threatened black cockatoo species (0.75 ha of unsuitable foraging habitat).
- The highest-ranked hollow, i.e., the ranked 3 hollow tree, is retained along with two ranked 4 tree hollow trees.
- Within a 12 km radius of the site, there are 9,225.76 ha of remnant native vegetation. It is expected that the majority of this vegetation would provide suitable foraging, roosting, and nesting habitat at levels equal to or greater than those present within the site (**Attachment 3, Figure 5**).
- The assessment against the Significant Impact Guidelines - Matters of National Environmental Significance (**Attachment 1, Table 12**) concluded:
    - The implementation of the Amana Living ICC project **will not:**
        - Leads to a long-term decrease in the size of the population
        - Reduce the area of occupancy of the species
        - Fragment the existing population into two or more populations
        - Adversely affect the habitat critical to the survival of the species
        - Disrupt the breeding cycle of a population
        - 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 endangered or critically endangered species habitat.
        - Introduce disease that may cause the species to decline.
        - Interfere with the recovery of the species.

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

The Amana Living Meadow Spring ICC concept design locates buildings and infrastructure to minimise the clearing impacts, specifically (**Attachment 1, Appendix 1**):

- Retaining a central corridor of 'High' retention value (nine Tuart trees in total) in an area of approximately 1,780 m2. An additional three trees are retained along the western and northern boundaries.
- Twelve of the surveyed 46 potential back cockatoo nesting trees are proposed to be retained. The highest-ranked hollow trees were prioritised for retention, including the Class 3 hollow tree and 2 of the Class 4 hollow trees.

Mitigate

- The key mitigation actions include (**Attachment 1, Section 4**):
    - Where avoidance measures cannot be implemented within the disturbance footprint based on the required works of the proposed action, any potential impacts to MNES will be mitigated and managed in accordance with standard best-practice construction management mitigation measures to be implemented to minimise the possible effects to fauna and vegetation. This includes the following mitigation actions:
        - Tree Assessment and Retention Management Plan, which includes:
            - Informs all contractors regarding the twelve trees to be retained.
            - Defining the Tree Protection Zone (TPZ) and establishing the TPZ within the site.
            - Management actions and activities within the TPZ.
            - Compliance reporting.
            - A qualified arborist will prepare the tree management plan.
        - Fauna Relocation Management Plan, which includes:
            - A review of the vertebrate fauna potentially occurring in the site.
            - Responsible ecologist implementing the fauna capture and relocation program.
            - Regulation 28 licence to take and relocate fauna requirement.
            - Management of the proposed clearing procedure.
            - Detail the proposed trapping methods, including the number and type of traps.
            - Reporting procedures.
        - A qualified ecologist/zoologist will prepare and implement the Fauna Relocation Management Plan.
        - Construction Environmental Management Plan, which includes:
            - Operational hours
            - Dust and noise management.
            - Pre-start civil contractor briefings to highlight no-go areas (i.e. avoidance areas and trees to be retained).
            - Demarcation of retained vegetation (i.e. around individual tree protection zones).
            - Directional clearing to encourage ground-dwelling and avian fauna dispersal.
            - Measures to reduce the risk of accidental bushfire ignition.
            - Stockpiling and removal of cleared vegetation.
            - Accidental spill management.

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 action is not considered 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
Yes		Actitis hypoleucos	Common Sandpiper
Yes		Anous stolidus	Common Noddy
Yes		Apus pacificus	Fork-tailed Swift
Yes		Ardenna carneipes	Flesh-footed Shearwater, Fleshy-footed Shearwater
Yes		Ardenna grisea	Sooty Shearwater
Yes		Balaenoptera edeni	Bryde's Whale
Yes		Balaenoptera musculus	Blue Whale
Yes		Calidris acuminata	Sharp-tailed Sandpiper
Yes		Calidris canutus	Red Knot, Knot
Yes		Calidris ferruginea	Curlew Sandpiper
Yes		Calidris melanotos	Pectoral Sandpiper
Yes		Caperea marginata	Pygmy Right Whale
Yes		Carcharhinus longimanus	Oceanic Whitetip Shark
Yes		Carcharias taurus	Grey Nurse Shark
Yes		Carcharodon carcharias	White Shark, Great White Shark
Yes		Caretta caretta	Loggerhead Turtle
Yes		Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
Yes		Chelonia mydas	Green Turtle
Yes		Dermochelys coriacea	Leatherback Turtle, Leathery Turtle, Luth
Yes		Diomedea amsterdamensis	Amsterdam Albatross

Direct impact	Indirect impact	Species	Common name
Yes		Diomedea dabbenena	Tristan Albatross
Yes		Diomedea epomophora	Southern Royal Albatross
Yes		Diomedea exulans	Wandering Albatross
Yes		Diomedea sanfordi	Northern Royal Albatross
Yes		Eubalaena australis	Southern Right Whale
Yes		Hydroprogne caspia	Caspian Tern
Yes		Lamna nasus	Porbeagle, Mackerel Shark
Yes		Limosa lapponica	Bar-tailed Godwit
Yes		Macronectes giganteus	Southern Giant-Petrel, Southern Giant Petrel
Yes		Macronectes halli	Northern Giant Petrel
Yes		Megaptera novaeangliae	Humpback Whale
Yes		Mobula alfredi	Reef Manta Ray, Coastal Manta Ray
Yes		Mobula birostris	Giant Manta Ray
Yes		Motacilla cinerea	Grey Wagtail
Yes		Natator depressus	Flatback Turtle
Yes		Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
Yes		Onychoprion anaethetus	Bridled Tern
Yes		Orcinus orca	Killer Whale, Orca
Yes		Pandion haliaetus	Osprey
Yes		Phaethon rubricauda	Red-tailed Tropicbird
Yes		Phoebetria fusca	Sooty Albatross
Yes		Pristis pristis	Largetooth Sawfish, Freshwater Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish
Yes		Rhincodon typus	Whale Shark
Yes		Sterna dougallii	Roseate Tern

Direct impact	Indirect impact	Species	Common name
Yes		Sternula albifrons	Little Tern
Yes		Thalassarche carteri	Indian Yellow-nosed Albatross
Yes		Thalassarche cauta	Shy Albatross
Yes		Thalassarche impavida	Campbell Albatross, Campbell Black-browed Albatross
Yes		Thalassarche melanophris	Black-browed Albatross
Yes		Thalassarche steadi	White-capped Albatross
Yes		Tringa nebularia	Common Greenshank, Greenshank

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. *

The site does not provide suitable habitat for migratory species.

4.1.6 Nuclear

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

No

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

The proposed action does not involve any nuclear activity.

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.

—

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

No

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

The proposed action is not located within a Commonwealth Marine area.

4.1.8 Great Barrier Reef

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

No

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

The proposed action will not impact 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.

—

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

No

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

The proposed action is not located within or adjacent to Commonwealth Land.

4.1.11 Commonwealth Heritage Places Overseas

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

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

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

—

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

No

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

The proposed action will not impact any Commonwealth Heritage Places overseas.

4.1.12 Commonwealth or Commonwealth Agency

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

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

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

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. *

Lot 21 Oakmont Avenue, Meadow Springs, was acquired by Amana Living for the specific purpose of constructing and operating an integrated aged care facility. The site has the necessary land-use zoning under the MRS and the City of Mandurah LPS 12 to support the broad range of seniors' accommodation and associated facilities proposed in the Meadow Springs ICC development (**Attachment 1, Table 2**).

Alternative development locations were not considered because Amana Living does not own or have access to any other landholdings, zoned 'Urban' within the Mandurah region.

The Amana Living Meadow Springs ICC facility meets a key regional need. It directly responds to the Peel region's aging population and, importantly, supports the needed upgrade to Amana Living's existing Mandurah ICC facility.

The Meadow Springs ICC development concurrently addresses the requirements of a contemporary multifaceted aged care facility (i.e., independent living units, assisted living, day club) and the retention of Tuart woodland TEC and threatened black cockatoo nesting habitat within a comparatively small 1.5 ha site (**Attachment 1, Appendix 1**).

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	17/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	01/03/2025	No	High
#3.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf Threatened Black Cockatoo Species Habitat Assessment	09/03/2025	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	28/02/2025	No	High
#3.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf Threatened Black Cockatoo Species Habitat Assessment	08/03/2025	No	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High

3.1.4 Gradient relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	28/02/2025	No	High
#3.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf Threatened Black Cockatoo Species Habitat Assessment	08/03/2025	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	28/02/2025	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence

#1.	Link	Aboriginal Cultural Heritage Inquiry System https://espatial.dplh.wa.gov.au/ACHIS/index.html..	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Perth Groundwater Map https://maps.water.wa.gov.au/Groundwater/			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	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	28/02/2025	No	High
#3.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf Threatened Black Cockatoo Species Habitat Assessment	08/03/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 2 - Flora and Vegetation Survey Meadow Springs.pdf Detailed vegetation and flora survey and assessment of the Tuart woodland threatened ecological community	28/02/2025	No	High
#3.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf	08/03/2025	No	High

Threatened Black Cockatoo Species
Habitat Assessment

4.1.4.9 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High
#2.	Document	Attch 3 - Lot 21 Oakmont Ave Threatened Black Cockatoo Habitat Assessment.pdf Threatened Black Cockatoo Species Habitat Assessment	08/03/2025	No	High

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

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Attch 1 - Amana Living Meadow Springs EPBC Act supporting report_ Dec 2025.pdf EPBC Act referral supporting document	16/12/2025	No	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	32655914015
Organisation name	PENTIUM WATER PTY LTD
Organisation address	6005 WA
Representative's name	John Halleen
Representative's job title	Environmental Planner
Phone	08 6182 1790
Email	jhalleen@pentiumwater.com.au
Address	Level 1, 640 Murray Street, West Perth, WA 6005

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

☑ Check this box to confirm these are the correct identification details. *

☑ By checking this box, I, **John Halleen of PENTIUM WATER 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

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	45582438433
Organisation name	AMANA LIVING INCORPORATED
Organisation address	6008 WA
Representative's name	Rita Sheridan

Representative's job title	Chief Property and Retirement Living Officer
Phone	+61 400 136 892
Email	rsheridan@amanaliving.com.au
Address	541 Hay Street, Subiaco, WA 6008

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

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Rita Sheridan of AMANA LIVING INCORPORATED**, 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

✔ 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. *

☑ Check this box to confirm these are the correct identification details. *

☑ I, **Rita Sheridan of AMANA LIVING INCORPORATED**, 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. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.