



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7986/1
Permit Holder:	Hadouken Pty Ltd
Duration of Permit:	1 September 2018 – 1 September 2023

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Construction of a solar farm

2. Land on which clearing is to be done

Lot 2977 on Plan 89050, Collie

3. Area of Clearing

The Permit Holder must not clear more than 0.727 hectares of native vegetation within the areas cross-hatched yellow on attached Plan 7986/1a.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

6. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

7. Clearing not authorised

This Permit does not authorise the Permit Holder to clear native vegetation between the months of October and May.

8. Revegetation and rehabilitation

- (a) The permit holder must at an *optimal time* plant a minimum of:
 - (ii) 0.46 hectares at a density of 700 stems per hectare within the area cross hatched red on attached Plan 7986/1b using tree and understory species from the list at Schedule 1; and
 - (iii) 1.0 hectare at a density of 200 stems per hectare within the area cross hatched red on attached Plan 7986/1c using understory species from the list at Schedule 1.
- (b) Within 12 months of undertaking *planting* in accordance with condition 9(a) of this Permit the Permit holder shall:
 - (i) engage an *environmental specialist* to determine the survival rate of the species planted in accordance with condition 9(a); and
 - (ii) where in the opinion of an *environmental specialist*, the survival rate of species planted determined under Condition 9(b)(i) of this Permit will not result in a survival rate of a minimum of 700 stems per hectare within the area cross hatched red on attached Plan 7986/1b and 200 stems per hectare within the area cross hatched red on attached Plan 7986/1c, undertake additional plantings until a minimum survival rate of a minimum of 700 stems per hectare within the area cross hatched red on attached Plan 7986/1b and 200 stems per hectare within the area cross hatched red on attached Plan 7986/1c is achieved.
- (c) Where additional planting is undertaken in accordance with condition 9(b)(ii) of this Permit, the Permit Holder shall repeat condition 9(b)(i) within 12 months of undertaking the additional planting.
- (d) Where there is a determination by an *environmental specialist* that the survival rates specified in condition 9(a)(i) and (ii) is achieved, as determined in Condition 9(b)(i) and (ii) of this permit, that determination shall be submitted for the consideration of the CEO. If the CEO does not agree with the determination made, under condition 9(b)(ii) the CEO may require the Permit Holder to undertake additional planting in accordance with the requirements under condition 9(b)(ii).

PART III - RECORD KEEPING AND REPORTING

9. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 6 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 8 of this Permit; and
- (f) details of activities carried out under condition 8 of this Permit.

10. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 9 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.

- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 1 June 2023, the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

environmental specialist: means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist.

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

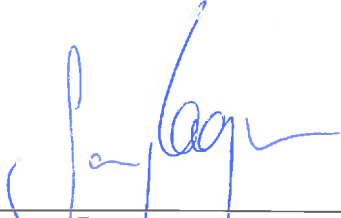
optimal time means the period from May to September; for undertaking *planting*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

suitable species means species listed in Table 1 below:

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*;
or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Samara Rogers
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

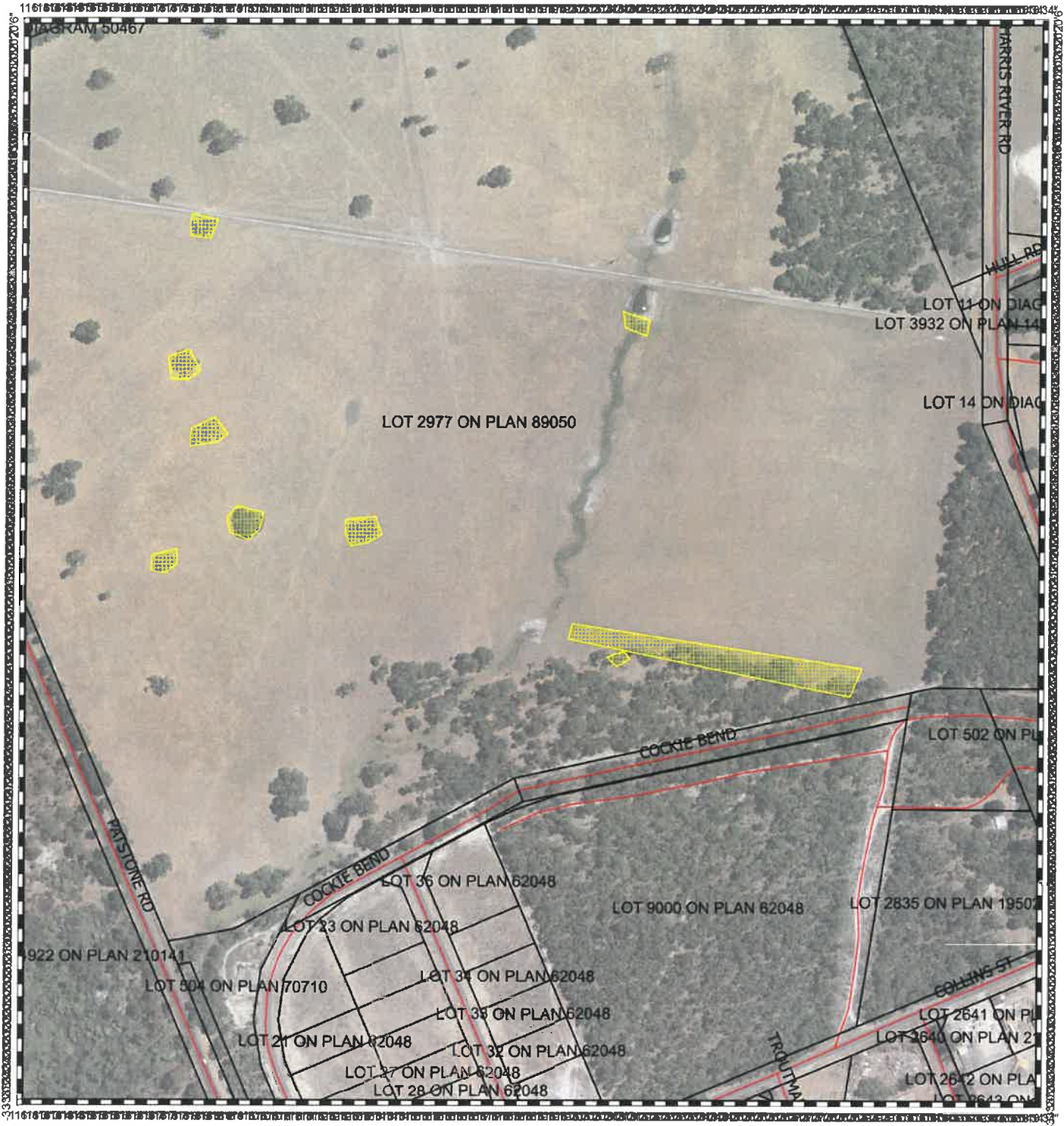
2 August 2018

Schedule 1


Revegetation List (DWER Land and Clearing (CAWSA) Management)

Scientific name	Common name	Form	Planting zone	Comments
<i>Corymbia calophylla</i>	marri	tree	Hill slope	Key tree for area
<i>Eucalyptus marginata</i>	jarrah	tree	Hill slope	
<i>Eucalyptus rudis</i>	flooded gum	tree	Waterways	Flood tolerant
<i>Banksia grandis</i>	bull banksia	tree	Hill slope	
<i>Allocasuarina fraseriana</i>	sheoak	tree	Hill slope	
<i>Hakea prostrata</i>	harsh hakea	large shrub	Hill slope	
<i>Xylomelum occidentale</i>	woody pair	Small tree	Hill slope	
<i>Bossiaea aquifolium</i>	water bush	shrub	Everywhere	
<i>Hibbertia cuneiformis</i>	cutleaf hibbertia	shrub	Hill slopes	Up to 2m high
<i>Acacia pulchella</i>	prickly mooses	shrub	Anywhere	Up to 2m high
<i>Acacia alata</i>	winged wattle	shrub	Hill slopes	1.5m
<i>Kennedia spp</i>	kennedia	groundcover	Hill slopes	
<i>Melaleuca raphiophylla</i>	swamp paperbark	tree	Wetland/Waterway	Flood tolerant
<i>Melaleuca preissiana</i>	moonah	tree	Wetland/Waterway	Waterlogging tolerant
<i>Hypocalymma angustifolium</i>	white myrtle	shrub	Wetland/Waterway	Waterlogging tolerant
<i>Taxandria linearifolia</i>	teatree/ swamp peppermint	shrub	Wetland/Waterway	Waterlogging tolerant
<i>Baumea vaginalis</i>	sheath twig rush	rush	Wetland/waterway	Waterlogging tolerant
<i>Lepidosperma effusum</i>	spreading sword sedge	sedge	Wetland/Waterway	Waterlogging tolerant
<i>Juncus pallidus</i>	tall rush	rush	Wetland /Waterway	Water logging tolerant.

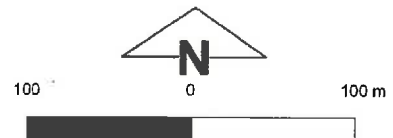
Plan 7986/1a



Legend

 CPS areas approved to clear
Virtual Mosaic - WA Now

 roads



MGA 94
Geocentric Datum of Australia 1994

J. J. Jones
Date 2/8/18

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986





GOVERNMENT OF
WESTERN AUSTRALIA

Plan 7986/1b



Legend

-  CPS subject to conditions
- Virtual Mosaic - WA Now
-  roads



MGA 94
Geocentric Datum of Australia 1994
Jadana Jagers Date: 2/8/18
Officer with delegated authority under Section 20
of the Environmental Protection Act 1986






GOVERNMENT OF
WESTERN AUSTRALIA

Plan 7986/1c



Legend

-  CPS areas applied to clear
-  CPS subject to conditions
- Virtual Mosaic - WA Now
-  roads



MGA 94
Geocentric Datum of Australia 1994

Janae Rogers Date *2/8/2018*
 Officer with delegated authority under Section 20
 of the Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: CPS 7986/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Hadouken Pty Ltd
Application received date: 9 March 2018

1.3. Property details

Property: Lot 2977 on Deposited Plan 89050, Collie
Local Government Authority: COLLIE, SHIRE OF
Localities: Collie

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.727 (as revised)		Mechanical Removal	Construction of a solar farm

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 2 August 2018
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to principle (f) and is not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer noted that the application area is located within Zone A of the Wellington Dam Catchment Area. The Delegated Officer had regard for the Department of Water and Environmental Regulation's (DWER) Policy and Guidelines for the "Granting of Licences to Clear Indigenous Vegetation", and has conditioned the Permit Holder to revegetate an area twice the size of the clearing area with local provenance species to mitigate potential salinity impacts to water resources, and to ensure that there is no net reduction in native vegetation cover within the catchment.

The Delegated Officer also noted the management measures proposed by the applicant and determined that the proposed clearing is not likely to result in any unacceptable environmental impacts.

The Delegated Officer determined that the proposed clearing may increase the spread of weeds and dieback into adjacent vegetation. To minimise this impact, a condition has been placed on the permit requiring the implementation of weed and dieback management measures.

2. Site Information

Clearing Description: The revised application is for the proposed clearing of 0.727 hectares of native vegetation within Lot 2977 on Plan 89050, Collie, for the construction of a solar farm. The application area is indicated in Figure 1.

Vegetation Description: The vegetation within the application area is mapped as the following vegetation complexes:

- Muja (MJ) Complex: Open woodland of *Melaleuca preissiana* (moonah)-*Banksia littoralis* (swamp banksia)-*Banksia ilicifolia* (holly-leaved banksia) with some *Eucalyptus patens* (Swan River blackbutt) on moister sites, *Banksia* spp. on drier sites of valley floors in the subhumid zone (Government of Western Australia, 2018).

In support of the application, the applicant provided the report of an environmental assessment undertaken by Matters of Environment, which included a Level 1 site surveys on 23 and 29 December 2017 to inspect habitats and determine broad vegetation types. The Matters of Environment (2018) report found that the vegetation within the application area consists of *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah) over pasture weeds in the majority of the application area and *Melaleuca raphiophylla* (swamp paperbark) over *Juncus* spp. (rushes) and pasture weeds around the creek (MoE, 2018). The southern most part of the application area consists of *Corymbia calophylla* (marri) and *Eucalyptus marginata* (jarrah) over pasture weeds with minimal understory of *Xylomelum occidentale* (woody pear) and *Grevillea* sp.

Vegetation Condition: The condition of the vegetation within the application area is:

- Completely Degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery 1994).

The condition of the vegetation within the application area was determined from the Matters of Environment report (MoE, 2018).

Soil/Landform Type:

The application area is mapped as the following soil type:

- Cb44: Broadly undulating lands with occasional high ridges or low flat-topped hills: dominant soils are cracking clays of moderate depth (two to three feet), chiefly grey with smaller areas of brown clays; in some areas a slight or moderate gilgai microrelief may be present (one to two feet); associated are higher ridges with loamy red duplex soils and smaller areas of mostly shallow and possibly stony soils; densely vegetated low hills or high ridges occurring in the unit have shallow stony clays; on the lower slopes of such areas friable earths occur; throughout the unit small alluvial valley plains occur with deep clay soils (Northcote et al., 1960-68).

Comments:

The local area considered in the assessment of this application is a 10 kilometre radius measured from the perimeter of the application area. The local area retains approximately 57 per cent native vegetation cover.

3. Minimisation and mitigation measures

The Matters of Environment (2018) report outlines a number of management measures proposed to be implemented by the applicant, which are listed below.

General impacts:

- Maintain and enhance woodland on eastern perimeter of solar farm to screen local residents and vehicle drivers from potential glare and visual intrusion (MoE, 2018).
- Species used in perimeter landscape planting to be of local species and known to be a foodplant of black cockatoos (MoE, 2018). Planting scheme would also provide other native fauna with shelter in moving across the landscape (MoE, 2018).
- Encourage regeneration of woodland floor by excluding grazing (MoE, 2018). Encourage new growth of jarrah and marri in areas surrounding the site that will not hinder electricity generation of the solar farm, e.g. around the southern perimeter of the development area (MoE, 2018).

Black cockatoos:

- Provision of two artificial nest hollows "cockatubes" in woodland adjacent to the site (MoE, 2018).
- Felling of trees to be conducted outside the breeding or peak seasons where possible (MoE, 2018). If cockatoos may be breeding, trees with hollows are to be monitored prior to felling by a competent ecologist to ensure no black cockatoos are nesting (MoE, 2018).
- Monitoring will be conducted from a distance that will not disturb birds in the hollows (MoE, 2018).
- If black cockatoos are found to be nesting in any tree, the tree must be left in situ to allow the birds to vacate naturally (MoE, 2018).
- Planting schemes for screening between Harris River Road and the proposed solar farm, and to augment adjacent woodland, to use native flora of local source, and selected from the list of food plants preferred by black cockatoos, e.g. *Banksia* spp., *Hakea* spp. and *Allocasuarina* spp. (MoE, 2018).

Rainbow bee-eater (*Merops ornatus*; Migratory):

- Construction of the solar farm is currently scheduled to occur after all fledglings will have left nests and therefore unlikely to impact this species (MoE, 2018).
- If however, the schedule changes and construction coincides with the breeding period of this species, the site should be searched by a competent scientist before site activities to ensure the risk is negligible (MoE, 2018).

Bats:

- Prior to lopping tree limbs, hollows will be inspected for bats and other vertebrate fauna (MoE, 2018).
- Where bats are found the tree limb will be left in situ while work continues around it (MoE, 2018). If bats are still present the tree limb will either be left until the following day or be cut below the location of the bat roost and lowered to the ground to allow for bats to vacate (MoE, 2018).

In addition, the applicant advised that any trees along the southern perimeter of the application area that have a diameter at breast height of 300 millimetres or greater will be retained.

4. Assessment of application against clearing principles

Noting the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to comprise a high level of biological diversity.

According to available databases, 10 threatened, eight priority and one migratory fauna species have been recorded within the local area. Based on the current distributions and habitat preferences of these species, and the mapped vegetation type within the application area, the application area could potential to provide habitat for eight of these species:

- The application area contains suitable foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*; Endangered), Baudin's cockatoo (*Calyptorhynchus baudinii*; Endangered) and forest red-tailed black cockatoo (*Calyptorhynchus banksia* subsp. *naso*; Vulnerable). Noting the extent of the proposed clearing, the condition of the vegetation within the application area, and the extent of vegetation in the local area, the habitat within the application area is not likely to be significant for these species. The Matters of Environment report recorded the presence of tree hollows within the application area which are likely to be suitable for nesting by black cockatoo species (MoE, 2018). The Matters of Environment (2018) report concludes that Carnaby's cockatoo is unlikely to breed within the application area, however notes that Baudin's cockatoo and forest red-tailed black cockatoo could potentially breed within the application area (MoE, 2018). The applicant's suggested management measures in relation to impacts to these species are outlined in Section 3.

- The rainbow bee-eater occurs in numerous habitats including open forests and woodlands, shrublands, in cleared or semi-cleared habitats such as areas of human habitation and farmland, and prefers open, cleared or lightly-timbered areas that are often, but not always in close proximity to permanent water (DotEE, 2018). The application area may provide suitable habitat for this species, however noting its highly mobile nature, the proposed clearing is unlikely to impact on its conservation status. There is a potential that rainbow bee-eaters could breed in the sandy substrates within the application area, and would be at risk of injury or abandonment of the nest during the breeding period of August to January (MoE, 2018). The applicant's suggested management measures in relation to impacts to rainbow bee-eaters are outlined in Section 3.
- The western false pipstrelle (*Falsistrellus mackenziei*; Priority 4) and other species of bats may roost in hollows or cavities within the trees across the application area, and could be injured if present when trees are felled (MoE, 2018). The applicant's suggested management measures in relation to impacts to bat species are outlined in Section 3.
- The woylie (*Bettongia pencillata*; Endangered), chuditch (*Dasyurus geoffroyii*; Vulnerable), western brush wallaby (*Notamacropus irma*; Priority 4) and water-rat/rakali (*Hydromys chrysogaster*; Priority 4) may utilise the vegetation within the application area when roosting, moving through the landscape, or hunting within the local area (MoE, 2018). Noting the extent of the proposed clearing, the condition of the vegetation within the application area, and the extent of vegetation in the local area, the habitat within the application area is not likely to be significant for these species.

The application area may offer roosting and nesting opportunities for indigenous fauna, however noting the extent of the proposed clearing, the condition of the vegetation within the application area, and the extent of vegetation in the local area, the application area is not likely to comprise significant habitat for indigenous fauna, including species of conservation significance.

According to available databases, one rare and 15 priority flora species have been recorded within the local area. The Matters of Environment (2018) report states that the application area is within a paddock that has been used to graze cattle for at least 20 years (MoE, 2018). Noting this and the condition of the vegetation within the application area, the application area is not likely to include, or be necessary for the continued existence of, rare flora.

There is potential for weeds and dieback to spread or be introduced into adjacent vegetation as a result of the proposed clearing. The implementation of weed and dieback hygiene management practices will assist in minimising the risk of spread of weeds and dieback into adjacent vegetation.

According to available databases, there are no known threatened or priority ecological communities within the local area. Noting the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of a threatened ecological community.

According to available databases, a seasonal creek bisects the application area from north to south. Aerial photography indicates that the creek is almost completely devoid of native vegetation (refer Figure 1). As discussed under Section 2, the vegetation in this portion of the application area comprises swamp paperbark trees and rushes. Two swamp paperbark trees are proposed to be cleared. On this basis, the proposed clearing is at variance to principle (f). Noting that only 2 trees are proposed to be cleared, the proposed clearing is not likely to significantly impact the environmental values of the watercourse.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The application area is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia bioregion, which retains approximately 53.41 per cent of the pre-European vegetation extent, and is mapped as Mattiske vegetation complex MJ, which retains approximately 59.51 per cent of the pre-European vegetation extent (Government of Western Australia, 2018). Noting this, and the extent of vegetation cover remaining in the local area (approximately 57 per cent), the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

The application area is approximately 600 metres from both Collie State Forest and Harris River State Forest, and approximately 1.5 kilometres from Westralia Conservation Park. Wyvern Road Nature Reserve is 4.5 kilometres from the application area and Wellington National Park is 7.1 kilometres from the application area. There are numerous privately-managed conservation areas within the local area, the nearest of these being approximately 2.6 kilometres from the application area. Given the distance between these conservation areas and the application area, and noting the extent of vegetation in the local area, the proposed clearing is not likely to have an impact on the environmental values of these conservation areas.

Land degradation risk mapping indicates that the mapped land unit within the application area has a low risk of water erosion, wind erosion, waterlogging, subsurface compaction and eutrophication (phosphorus export), however approximately 30-50 per cent of the mapped land has a moderate to high salinity risk or is presently saline (Department of Primary Industries and Regional Development, 2018). Noting the mapped soil type, the size of the application area, the condition of the vegetation within the application area and the extent of vegetation in the local area, the proposed clearing is unlikely to cause appreciable land degradation.

Noting that a portion of the proposed clearing impact will vegetation growing in association with a watercourse, the main risk to water resources from the proposed clearing relates to the potential for soil erosion resulting in turbidity and siltation of surface water within the watercourse. On this basis the proposed clearing may cause deterioration to the quality of surface water. Noting the extent of the proposed clearing, impacts to surface water quality are likely to be short-term.

Noting the extent of the proposed clearing, the condition of the vegetation within the application area and the extent of vegetation in the local area, the proposed clearing is not likely to cause deterioration in the quality of underground water, and is not likely to cause, or exacerbate, the incidence or intensity of flooding.

Given the above, the proposed clearing is at variance to clearing principle (f), may be at variance to clearing principle (i), and is not likely to be at variance to the remaining clearing remaining principles.

Planning instruments and other relevant matters

The original application was to clear 10 native trees (collectively 0.17 hectares) on Lot 2977 for the construction of a solar farm. During assessment, the applicant requested that this be increased to 0.727 hectares of native vegetation.

The original application was advertised on the Department of Water and Environmental Regulation (DWER) website on 26 March 2018 with a 14 day submission period. The revised application was advertised on the DWER website on 11 May 2018 for a seven day submission period. No public submissions have been received in relation to the application.

The applicant referred the solar farm project (which corresponded with the original application) to the Commonwealth Department of Environment and Energy (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 12 February 2018, in relation to potential impacts to Carnaby's cockatoo (DotEE ref. 2018/8160). On 25 March 2018, DotEE determined that the project was not a controlled action.

The Shire of Collie advised that it has been assessing a development application for a solar facility on Lot 2977 and that this proposed development has now been approved with conditions by a Joint Development Assessment Panel (Shire of Collie, 2018). The Shire of Collie advised that it has no objection to the clearing of the paddock trees as identified in this application subject to compliance with the recommendations contained within the Matters of Environment (2018) report (Shire of Collie, 2018). The applicant's suggested management measures are outlined in Section 3.

The application area is within the Wellington Dam Catchment Area, gazetted as a controlled catchment under the *Country Area Water Supply Act 1947* (CAWS Act). This catchment has been subject to CAWS Act native vegetation clearing controls since November 1976 to prevent salinisation of water resources. The application area is located within Zone A of the catchment, being a very high salinity risk area, where DWER Policy and Guidelines for the "Granting of Licences to Clear Indigenous Vegetation" provide for the grant of a CAWS Act clearing licence for essential property maintenance subject to an equivalent area being reforested within the same or higher salinity risk zone.

Given the proposed clearing is for essential property maintenance purposes and the trees to be cleared are unsustainable scattered paddock trees, and in accordance with DWER Policy and Guidelines for the CAWS Act. DWER's Land and Clearing Management advised that they have no objection to the clearing under the CAWS Act on the condition that a salinity mitigation offset is established on the property at a rate of 2 for 1 (DWER 2018). A condition has been placed on the Permit requiring the Permit Holder to revegetate an area twice the size of the equivalent clearing area (based on the number of trees to be cleared) is revegetated (being 0.46 hectares) with local provenance species to mitigate potential salinity impacts to water resources, and to ensure that there is no net reduction in native vegetation cover within the catchment. The revegetation will need to be maintained in perpetuity on the land holding, and is located in a similar landscape position as the vegetation that is proposed to be cleared.

The application area is within a registered Aboriginal site of significance – Lodged: site ID 4604 Old Aboriginal Reserve (historic camp, water source). It is noted that the applicant's EPBC Act referral document (DotEE ref. 2018/8160) states that an Indigenous Heritage Survey found that this registered site is located outside of the application area, and that the application area is within a buffer to it. It is the applicant's responsibility to comply with the requirements of the *Aboriginal Heritage Act 1972* and to ensure that no Aboriginal sites of significance are disturbed as a result of any activities.

5. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of the Environment and Energy (DotEE) (2018) *Merops ornatus* in Species Profile and Threats Database, Department of the Environment and Energy, Canberra. Available from: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.
- Department of Primary Industries and Regional Development (2018). NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed 8 March 2018).
- Department of Water and Environmental Regulation (2018) Advice received from Land and Clearing (CAWSA) Management (DWER ref: A1691086).
- Government of Western Australia (2018) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Biodiversity, Conservation and Attractions, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Matters of Environment (MoE) (2018) Environmental Assessment Report Collie Solar Farm. Unpublished report prepared for Hadouken Pty Ltd, dated January 2018 (DWER ref. A1640894).
- Northcote, K.H. with Beckmann, G.G., Bettenay, E., Churchward, H.M., van Dijk, D.C., Dimmock, G.M., Hubble, G.D., Isbell, R.F., McArthur, W.M., Murtha, G.G., Nicolls, K.D., Paton, T.R., Thompson, C.H., Webb, A.A. and Wright, M.J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shire of Collie (2018) Advice received in relation to clearing permit application CPS 7986/1, dated 26 April 2018 (DWER ref. A1662776).

GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed March 2018)
- Soils, Statewide
- Topographic contours
- Wetlands