



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7592/1
File Number: 2017/000686-1
Duration of Permit: From 19 May 2018 to 19 May 2032

PERMIT HOLDER

A1 Gravel Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 8 on Deposited Plan 401172, Hoddys Well

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 3.88 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7592/1.

CONDITIONS

1. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 19 May 2022.

2. 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:

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

3. Fauna management

- (a) In relation to the area cross-hatched yellow on attached Plan 7592/1, the Permit Holder must engage a *fauna specialist* to inspect that area immediately prior to, and for the duration of clearing, for the presence of *Calyptorhynchus latirostris* (Carnaby's cockatoo), *Calyptorhynchus baudinii* (Baudin's cockatoo) or *Calyptorhynchus banksii* subsp. *naso* (forest red-tailed black cockatoo).
- (b) Clearing must cease in any area where fauna referred to in condition 3(a) are identified until the individual(s) has moved on from that area to adjoining suitable habitat.
- (c) The Permit Holder shall construct, install and maintain 11 (eleven) artificial nesting hollows within the area cross-hatched red on attached Plan 7592/1 in accordance with 'How to design and place artificial hollows for Carnaby's cockatoo' dated 28 April 2015 (Department of Parks and Wildlife, 28 April 2015).
- (d) The Permit Holder shall monitor and maintain the artificial hollows for a period of 10 years.

4. Revegetation and rehabilitation

- (a) The Permit Holder shall *revegetate* and *rehabilitate* an area of at least 3.88 hectares within the area cross-hatched yellow on attached Plan 7592/1;
- (b) *Revegetation* and *rehabilitation* identified under conditions 4(a) shall commence within 12 months of completion of gravel extraction activities and no later than 19 May 2023;
- (c) The Permit Holder shall engage an *environmental specialist* to monitor annually for a period of 10 years, the areas *revegetated* and *rehabilitated* to determine vegetation cover, density, diversity, structure and weed cover and to assess areas *revegetated* and *rehabilitated* under this Permit against the completion criteria identified at condition 4(d);
- (d) The Permit Holder shall achieve the following completion criteria after the 10 year monitoring period for areas *revegetated* and *rehabilitated* under this Permit:

Criteria	Minimum to be achieved
Density	1,250 stems per hectare
Diversity	Diversity to comprise at least 75 per cent (at least eight) of the following: Tree species: <ul style="list-style-type: none"> • <i>Corymbia calophylla</i> (Lindl.) K.D.Hill & L.A.S.Johnson (marri) • <i>Eucalyptus accedens</i> W.Fitzg (powderbark wandoo) • <i>Eucalyptus marginata</i> Sm. (jarrah) • <i>Eucalyptus wandoo</i> Blakely (wandoo) Midstorey species: <ul style="list-style-type: none"> • <i>Acacia pulchella</i> R.Br. (prickly Moses) • <i>Banksia sessilis</i> (Knight) A.R.Mast & K.R.Thiele (parrotbush) • <i>Daviesia horrida</i> Meisn. (prickly bitter pea) • <i>Gastrolobium calycinum</i> Benth. (York Road Poison) • <i>Hakea cristata</i> R.Br. (snail hakea) • <i>Hakea trifurcata</i> (Sm.) R.Br. (two-leaf hakea) Understorey species: <ul style="list-style-type: none"> • <i>Banksia nivea</i> Labill. (honeypots) • <i>Hibbertia hypericoides</i> (DC.) Benth. (yellow buttercups)
Structure	Structure of revegetation to comprise: <ul style="list-style-type: none"> • at least 70 per cent tree species; • at least 20 per cent midstorey species; and • at least 10 per cent understorey species.
Weed cover	Maximum of 20 per cent

- (e) The Permit Holder shall undertake the following remedial actions for areas *revegetated* and *rehabilitated* where remedial triggers are met during the 10 year monitoring period:

Contingency trigger	Contingency action
Density less than 1,250 stems per hectare	<ul style="list-style-type: none"> • Undertake direct seeding; and • Procure or propagate additional seedlings and undertake infill planting.
Diversity less than 75 per cent of species	
Structure: <ul style="list-style-type: none"> • tree species less than 70 per cent; • midstorey species less than 20 per cent; and/or • understorey species less than 10 per cent. 	
Weed cover greater than 20 percent	Implement revised hygiene control measures

5. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) 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;
 - (ii) the date that the area was cleared;
 - (iii) the size of the area cleared (in hectares); and
 - (iv) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 2 of this Permit.
- (b) In relation to the fauna management pursuant to condition 3 of this Permit:
 - (i) the location of installed artificial nesting hollows 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;
 - (ii) the name and number of each fauna species identified; and
 - (iii) the name and number of each fauna species removed by a *fauna specialist*.
- (c) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 4 of this Permit:
 - (i) the location of any area *revegetated* and *rehabilitated* recorded as a shapefile;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
 - (iv) the date that the area was *revegetated* and *rehabilitated*; and
 - (v) a copy of a report(s), prepared by an *environmental specialist*, detailing the *revegetation* and *rehabilitation* activities undertaken and results for the monitoring of vegetation cover, density, diversity, structure and weed cover.

6. 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 5 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 19 February 2032, the Permit Holder must provide to the *CEO* a written report of records required under condition 5 of this Permit where these records have not already been provided under condition 6(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*;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

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.

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the *CEO* as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Wildlife Conservation Act 1950*.

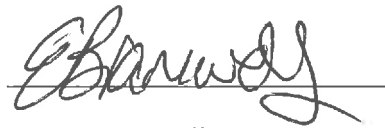
local provenance means native vegetation seeds and propagating material from natural sources within 10 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared.

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

regenerate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area; and

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

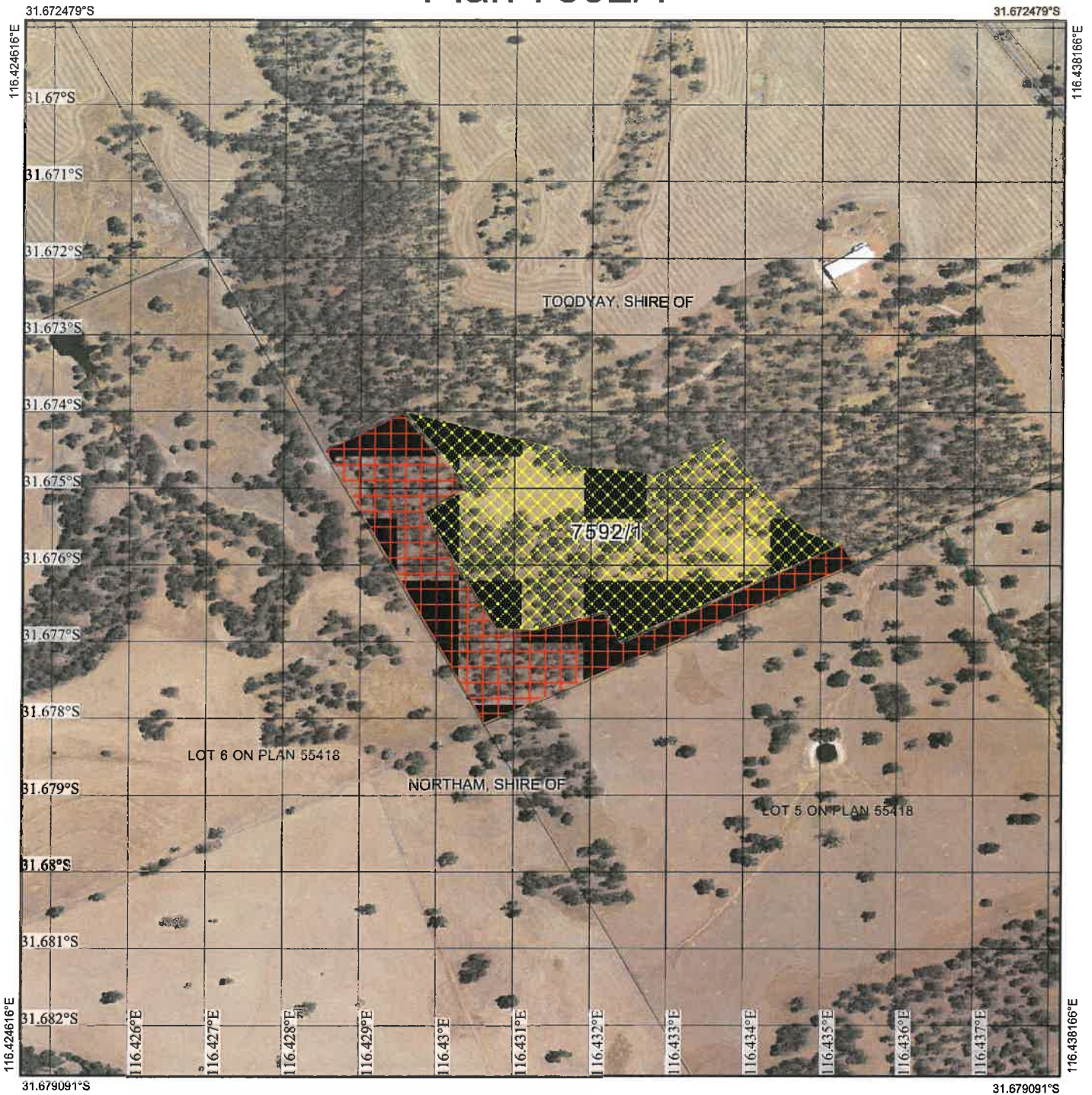


Emma Bramwell
A/MANAGER
CLEARING REGULATION





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

19 April 2018

Plan 7592/1



Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Clearing Instruments Conditions



1:6,805

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

E Bramwell Date 19/04/18
E BRAMWELL

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



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 WESTERN AUSTRALIA
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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7592/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: A1 Gravel Pty Ltd
Application received date: 12 May 2017

1.3. Property details

Property: LOT 8 ON PLAN 401172, HODDYS WELL
Local Government Authority: TOODYAY, SHIRE OF
Localities: HODDYS WELL

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
3.88 (as revised)		Mechanical Removal	Extractive industry

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 19 April 2018

Reasons for Decision: The clearing permit application was received on 12 May 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to principle (b) and is not at variance to the remaining principles.

In considering the application, the Delegated Officer had regard for the applicant's avoidance and minimisation measures and the condition of the vegetation of the application area. The Delegated Officer determined that the proposed clearing will result in impacts to foraging and breeding habitats of threatened black cockatoo species, and is unlikely to have any other unacceptable environmental impacts.

To address the abovementioned environmental impact, the clearing permit requires the applicant to revegetate the application area following extraction activities, and to install artificial nesting boxes in a manner suitable for use by black cockatoos.

2. Site Information

Clearing Description: The application (as revised) is for the proposed clearing of 3.88 hectares of native vegetation (within a 9.57 hectare footprint) within Lot 8 on Deposited Plan 401172, Hoddys Well, for the purpose of gravel extraction.

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

- Michibin (Mi): described as open woodland of *Eucalyptus wandoo* (wandoo) over *Acacia acuminata* (jam) with some *Eucalyptus loxophleba* (York gum) on valley slopes, with low woodland of *Allocasuarina huegeliana* (rock sheoak) on or near shallow granite outcrops in arid and perarid zones (approximately 80 per cent of the application area has been mapped within this vegetation type); and
- Coolakin (Ck): described as woodland of wandoo with mixtures of *Eucalyptus patens* (blackbutt), *Eucalyptus marginata* subsp. *thalassica* (blue-leaved jarrah) and *Corymbia calophylla* (marri) on the valley slopes in arid and perarid zones (approximately 20 per cent has been mapped within this vegetation type) (Mattiske and Havel, 1998).

A site inspection conducted by officers of the former Department of Environment Regulation (DER) on 30 May 2017 found that the vegetation within the application area comprises regrowth of open wandoo woodland with occasional jarrah over scattered *Banksia sessilis* (parrot bush) and *Macrozamia riedelii* (zamia). The DER site inspection also found that the understorey within the application area has been impacted by historical grazing, and comprises primarily of weedy grasses and leaf litter, with regenerating parrot bush and *Hibbertia* species (DER, 2017).

Vegetation Condition: Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
To
Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).

The DER site inspection found that the vegetation within the application area is in degraded to completely degraded condition, with the majority of the vegetation in degraded condition (DER, 2017).

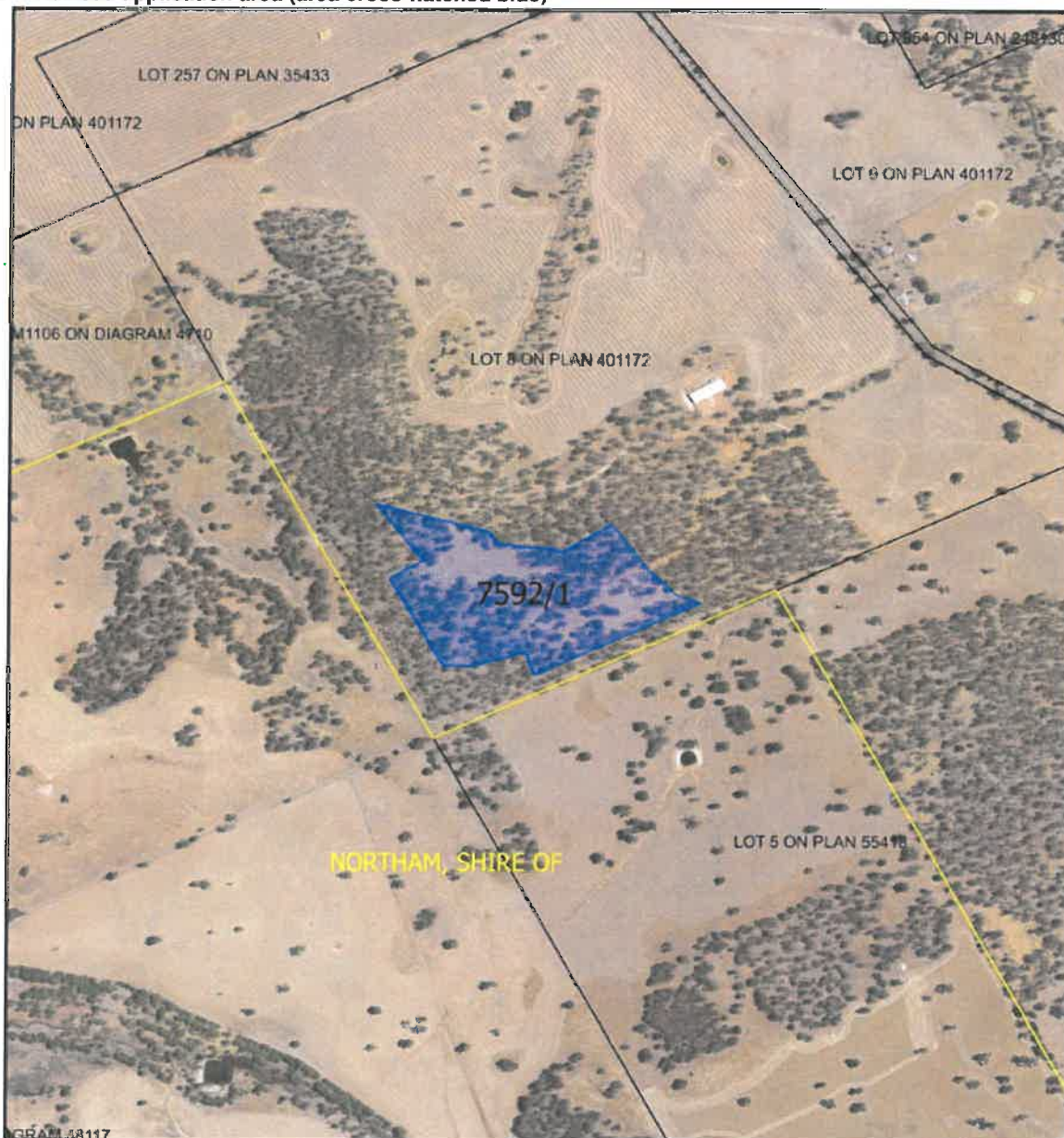
Soil/Landform Type: The application area is mapped as the following soil type:

- Tf3: described as low hilly to hilly terrain; comprises valleys that are frequently narrow and have short fairly steep pediments, along with breakaways, mesas, and occasional granite tors; included also are undulating areas representing elements of hard acidic yellow mottled soils with sandy acidic yellow mottled soils, all of which contain moderate to large amounts of ironstone gravels in their surface horizons; ironstone gravels occur on the ridge crests and on the fine gravel deposits of the gently undulating parts of the unit, along with leached sands (Northcote et al., 1960-68).

The DER site inspection found that the soils within the application area consisted of granitic soils, with granitic outcrops observed towards the northern portion of the application area (DER, 2017).

Comments: The local area considered in the assessment of this application is defined as a 10- kilometre radius measured from the perimeter of the application area.

Figure 1: Revised application area (area cross-hatched blue)



3. Minimisation and mitigation measures

The application was originally for the proposed clearing of 5.09 hectares of native vegetation within an 11.55 hectare footprint. Assessment of the original application found that the proposed clearing would impact on suitable foraging and nesting habitats for threatened fauna Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and Forest red-tailed black cockatoo (*Calyptorhynchus banksia* subsp. *naso*), including 22 habitat trees containing hollows.

To avoid and reduce the above impacts, the applicant reduced the application area to 3.88 hectares within a 9.57 hectare footprint. The revised application area includes 11 of the abovementioned habitat trees.

4. Assessment of application against clearing principles

As outlined in Section 2, the vegetation within the application area is comprised of regrowth of open wandoo woodland with occasional jarrah over scattered parrot bush and zamia, with an understorey comprising primarily of weedy grasses and leaf litter, regenerating parrot bush and *Hibbertia* species, in degraded to completely degraded condition (DER, 2017).

According to available databases, one declared rare flora species and 17 priority flora species have been recorded within the local area. The nearest record of conservation-significant flora is for *Sowerbaea multicaulis* (Priority 4), located approximately 1.8 kilometres from the application area. The Department of Biodiversity, Conservation and Attractions (DBCA) advised that there is the potential that *Grevillea candolleana* (Priority 2) could occur in the application area as it has been recorded in wandoo woodland with laterite similar to the habitat found within the application area, however noting the condition of the vegetation and lack of understorey the likelihood of this species occurring is reduced and if present would unlikely be a significant population (DBCA, 2017). Noting the habitat preferences of these species, the mapped soil and vegetation types within the application area, and the condition of the vegetation within the application area, these species are not likely to occur within the application area. The application area is not likely to include, or be necessary for the continued existence of, rare flora.

According to available databases, eight species of conservation-significant fauna have been recorded within the local area (DBCA, 2007-). Noting the habitat preferences of these species, and the type and condition of the vegetation within the application area, the majority of these species are not likely to occur within the application area. Notwithstanding, the application area is within the confirmed breeding range of Carnaby's cockatoo, within a mapped feeding area for Carnaby's cockatoo, and within close proximity to a mapped roosting area for Carnaby's cockatoo.

Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). Black cockatoos nest in hollows in live or dead trees of wandoo, York gum, jarrah, marri, blackbutt, *Eucalyptus gomphocephala* (karri), tuart, *Eucalyptus salmonophloia* (salmon gum), *Eucalyptus rudis* (flooded gum), *Eucalyptus accedens* (powderbark wandoo), and *Eucalyptus megacarpa* (bullich) (Commonwealth of Australia, 2012). The report of a black cockatoo habitat assessment survey provided by the applicant identified that 11 habitat trees suitable for threatened black cockatoo species occur within the revised application area (Harewood, 2017).

Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). The black cockatoo habitat assessment survey identified that no evidence of foraging and roosting by black cockatoos was found within the application area, and noted that the application area lacks quality foraging habitat (Harewood, 2017).

Noting the above, the proposed clearing is likely to impact habitat of black cockatoos and reduce the extent of nesting habitat for the black cockatoos within the local area. On this basis, the application area is likely to comprise significant habitat for black cockatoos. The installation of artificial nesting boxes within the surrounding vegetation, and revegetation of the application area following extraction activities with tree species that have the potential to develop suitable nesting hollows in future (such as wandoo) and understorey species that will provide suitable foraging habitat in future (such as *Banksia* and *Hakea* species), will assist in addressing this impact.

According to available databases, no threatened or priority ecological communities have been recorded within the local area. The application area is not likely to comprise the whole or a part of, or be necessary for the maintenance of, a threatened ecological community.

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 mapped vegetation complexes, being Michibin and Coolakin, retain approximately 25.6 per cent and 39.1 per cent of their pre-European extents within the Swan Interim Biogeographic Regionalisation of Australia bioregion respectively. Noting that the current extent of the Michibin vegetation complex is below the 30 per cent threshold for conservation, the application area may be within an extensively cleared area. Notwithstanding, noting the condition of the vegetation within the application area, and that the application area is not likely to comprise a high level of biological diversity, it is considered that the application area is not likely to be a significant remnant of native vegetation.

According to available databases, no wetlands or watercourses are mapped within the application area. No vegetation associated with watercourses was observed during the DER site inspection (DER, 2017). Noting the absence of surface water, the proposed clearing is not likely to impact on vegetation growing in association with a wetland or watercourse, or cause deterioration in the quality of surface or underground water, and is not likely to cause or exacerbate the incidence or intensity of flooding.

According to available databases, the application area is approximately 85 metres from the nearest conservation area, being a privately-managed remnant. Noting the distance and the presence of remnant vegetation between this conservation area and the application area, the proposed clearing is not likely to impact on the environmental values of this conservation area.

Noting the extent and purpose of the proposed clearing, and the mapped soil type and the condition of the vegetation within the application (including historical disturbance), the proposed clearing is not likely to cause appreciable land degradation. Revegetation of the application area following extraction activities will assist in minimising the risk of land degradation.

Noting the above, the proposed clearing is likely to impact on black cockatoo habitat, but is not likely to have any other unacceptable environmental impacts. The proposed clearing is at variance to principle (b), and is not likely to be at variance to the remaining principles.

Planning instruments and other relevant matters

The application area is zoned Production from Dryland Agriculture and Plantations under the Shire of Toodyay town planning scheme.

In response to DWER's direct interest correspondence, the Shire of Toodyay made two recommendations in relation to the application, including:

- that any mature hollow trees or trees with a potential Carnaby's cockatoo habitat within the application area are protected, and that specific vegetation protection measures be considered; and
- that appropriate vegetation offset measures be considered as a requirement to compensate for the impacts of the proposed clearing (Shire of Toodyay, 2017).

The applicant has obtained an Extractive Industry Licence from the Shire of Toodyay.

The applicant has provided a revegetation plan entitled 'Revegetation Plan – Lot 8 Chitty Road Shire of Toodyay – March 2018' (Lundstrom Environmental Consultants Pty Ltd, 2018). The revegetation plan outlines a staged approach to extraction. The revegetation plan contains the following completion criteria:

- a planted seedling (tubestock) or germinant (direct seeding) survival rate in Year 5 of 60 per cent or more representing at least 75 per cent of the intended species diversity (comprising four tree species and eight understorey species indigenous to the local area) will constitute success for this project; if mortality rates are higher than this, supplementary planting will be required in the subsequent year(s) until the target rate is achieved;
- weed cover within the revegetated areas is less than 20 per cent;
- no erosion scars are present within the rehabilitation areas; and
- native fauna are utilising vegetation within the rehabilitation areas (Lundstrom Environmental Consultants Pty Ltd, 2018)

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 29 May 2017 with a 21 day submission period. No public submissions have been received in relation to this application.

5. Applicant's submission

On 5 October 2017, a Department of Water and Environmental Regulation (DWER) Delegated Officer wrote to the applicant, outlining the environmental impacts identified during the assessment of the original application to clear 5.09 hectares of native vegetation within an 11.55 hectare footprint, notably that the proposed clearing would impact habitats of threatened black cockatoo species, and inviting the applicant to provide advice on how the impacts would be avoided or minimised, and how any unavoidable impacts would be offset (DWER ref. A1653442).

In response to the Delegated Officer's letter, the applicant provided the report of a black cockatoo habitat assessment (DWER ref. A1543269).

On 25 October 2017, a DWER Delegated Officer emailed the applicant, acknowledging receipt of the black cockatoo habitat assessment survey, and inviting the applicant to provide advice on how the impacts would be avoided or minimised (DWER ref. A1547003). The applicant was also advised that revegetation of the application area following extraction activities would be a requirement if a clearing permit was granted for the application, and that an extractive industry licence is required.

In response to the Delegated Officer's email, the applicant reduced the application area to 3.88 hectares within a 9.57 hectare footprint to avoid 11 of the 22 habitat trees (DWER ref. A1587722).

On 12 December 2017, a DWER Delegated Officer wrote to the applicant, outlining the environmental impacts identified during the assessment of the revised application, notably that the proposed clearing would impact 11 habitat trees, and inviting the applicant to install and monitor 11 artificial nesting hollows within surrounding vegetation to address this impact (DWER ref. A1578183). The applicant was also advised that revegetation of the application area following extraction activities would be a requirement if a clearing permit was granted for the application, and would be required to include suitable foraging and breeding habitat for black cockatoos, and that an extractive industry licence is required.

In response to the Delegated Officer's letter, the applicant agreed to install and monitor 11 artificial nesting hollows within surrounding vegetation, and to revegetate the application area following extraction activities suitable foraging and breeding habitat for black cockatoos (DWER ref. A1587722).

On 22 January 2018, a DWER Delegated Officer wrote to the applicant, providing agreement in principle to grant a clearing permit for the revised application once an extractive industry licence has been obtained from the Shire of Toodyay (DWER ref. A1600148). The applicant was also advised that conditions relating to the revegetation of the application area following extraction activities, and the installation of artificial nesting hollows for black cockatoos, would be a requirement if a clearing permit was granted.

In response to the Delegated Officer's letter, the applicant provided a copy of an extractive industry licence granted by the Shire of Toodyay on 8 March 2018, and a revegetation plan containing completion criteria (DWER ref. A1643105).

6. References

- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra. Available from: <https://www.environment.gov.au/system/files/resources/895d4094-af63-4dd3-8dff-ad2b9b943312/files/referral-guidelines-wa-black-cockatoo.pdf>
- Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Flora advice provided for clearing permit CPS 7592/1, received 5 July 2017 (DWER ref. A1516199).
- Department of Environment Regulation (DER) (2017) Site inspection report for clearing permit application CPS 7592/1, site inspection conducted 30 May 2017 (DWER ref. A1453317).
- Harewood, G. (2017) Black Cockatoo Habitat Assessment – Lot 8 Chitty Road, Hoddy's Well, Shire of Toodyay. Report prepared for Lundstrom Environmental Consultants Pty Ltd, dated October 2017 (DWER ref. A1653445).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Lundstrom Environmental Consultants Pty Ltd (2018) Revegetation Plan – Lot 8 Chitty Road Shire of Toodyay – March 2018. Unpublished report by Lundstrom Environmental Consultants Pty Ltd provided for clearing permit CPS 7592/1, received 12 March 2018 (DWER ref. A1643105).
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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 Toodyay (2017) Advice provided in relation to clearing permit application CPS 7592/1, received 23 June 2017 (DWER ref. A1459602).

GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Tenure
- DEC Covenant
- Groundwater salinity
- Hydrography, hierarchy
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed September 2017)
- Soils, Statewide
- Topographic contours
- Virtual mosaic
- Wetlands