



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7063/2
Permit Holder:	Juceda Investments Pty Ltd
Duration of Permit:	22 October 2016 – 22 October 2021

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

Clearing for the purpose of road construction, light industrial and hardstand facilities.

2. Land on which clearing is to be done

Lot 3 on Diagram 80639, Maddington
Lot 4 on Diagram 80639, Maddington
Lot 5 on Diagram 16852, Maddington
Lot 105 on Diagram 64113, Maddington
Lot 107 on Diagram 64424, Maddington

3. Area of Clearing

The Permit Holder must not clear more than 2.59 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7063/2.

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 etc 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 *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. Drainage management

The Permit Holder shall not cause or allow the discharge of sediments from within the areas permitted to be cleared under this permit, into Bush Forever site 53, being; Lot 109 on Diagram 64926, Maddington.

8. Vegetation management – fencing

- (a) Prior to commencing clearing, the Permit Holder shall fence the Bush Forever site 53 adjacent to Lot 107 on Diagram 64424, Maddington.
- (b) Within one month of installing the fence the Permit Holder shall notify the CEO in writing that the fence has been completed.

9. Wind erosion management

The Permit Holder shall not clear native vegetation within Lot 107 on Diagram 64424, Maddington unless the development of the hardstand and industrial facilities begins within one month of the clearing being undertaken.

DEFINITIONS

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


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

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;

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 Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Samara Rogers
A/MANAGER
CLEARING REGULATION

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

11 April 2017

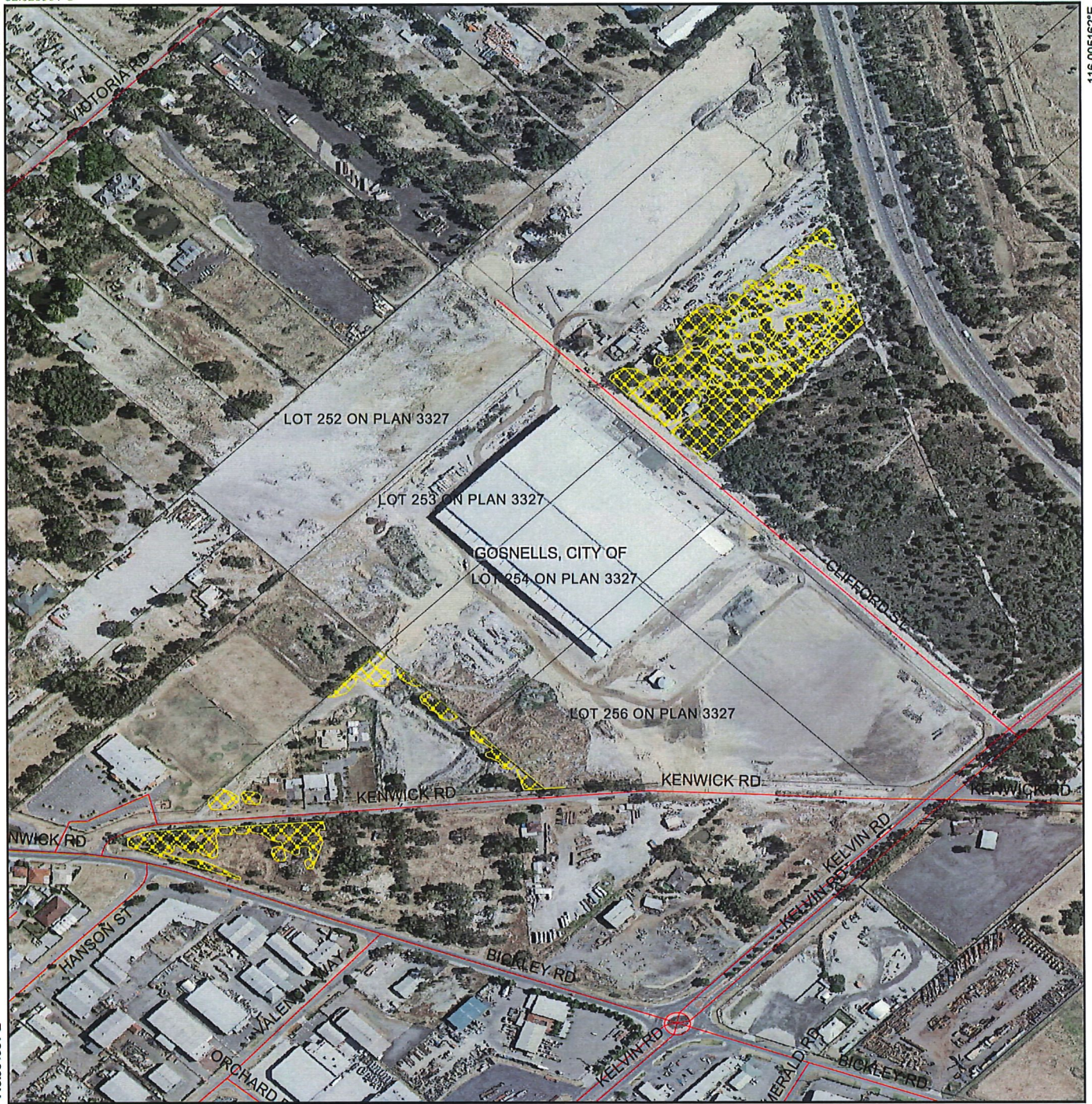
Plan 7063/2

32.026961°S

32.026961°S

115.994681°E

116.005162°E



116.005162°E

32.031855°S

32.031855°S

Legend

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



1:5,244

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Samara Rogers Date 11/4/2017

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



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WESTERN AUSTRALIA
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1. Application details

1.1. Permit application details

Permit application No.: 7063/2
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Juceda Investments Pty Ltd

1.3. Property details

Property: LOT 105 ON DIAGRAM 64113, MADDINGTON
LOT 107 ON DIAGRAM 64424, MADDINGTON
LOT 3 ON DIAGRAM 80639, MADDINGTON
LOT 4 ON DIAGRAM 80639, MADDINGTON
LOT 5 ON DIAGRAM 16852, MADDINGTON

Local Government Authority: GOSNELLS, CITY OF
DER Region: Greater Swan
DPaW District: SWAN COASTAL
Localities: MADDINGTON

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.59		Mechanical Removal	Building or structure

1.5. Decision on application

Decision on Permit Application: Granted

Decision Date: 11 April 2017

Reasons for Decision: The clearing permit application received on 16 November 2016 has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing may be at variance to Principles (d), (f), (g), (h) and (i), and is not likely to be at variance to the remaining Principles.

The Delegated Officer has determined that the proposed clearing may result in environmental impacts to a threatened ecological community (TEC), Bush Forever site 53 and a conservation category wetland. To mitigate the potential impacts to the TEC, Bush Forever site 53 and the conservation category wetland, conditions have been placed on the permit requiring; the site to be fenced prior to clearing and that no discharge of sediments occurs into these areas. Weed and dieback management practices will also minimise the potential impacts.

The Delegated Officer determined that the proposed clearing may cause appreciable land degradation through wind erosion. A wind erosion management condition has been added to the permit requiring development to commence within one month of undertaking the clearing.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard vegetation association 968 is described as medium woodland; jarrah, marri & wandoo (Shepherd et al., 2001).	The application is for the clearing of 2.59 hectares of native vegetation within Lot 5 on Diagram 16852, Lots 3 and 4 on Diagram 80639, Lot 105 on Diagram 64113 and Lot 107 on Diagram 64424, Maddington, for the purpose of establishing industrial and hardstand facilities.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	The condition and description of the vegetation within the application area was determined by a site inspection undertaken by Department of Environment Regulation (DER) officers on 4 July 2016 (DER, 2016), a flora and vegetation survey undertaken on March 2016 (Strategen Environmental Consultant Pty Ltd, 2016a) and a spring flora and vegetation survey undertaken on 21 September 2016 (Strategen Environmental Consultant Pty Ltd, 2016b).
Mapped Heddle vegetation Guildford complex is comprised of open forest to tall open forest and woodland (Heddle et al., 1980).			

Mapped Mattiske vegetation complex Fo consists of mosaic of open forest of *Corymbia calophylla* - *Eucalyptus wandoo* - *Eucalyptus marginata* subsp. *elegantella* and open forest of *Eucalyptus marginata* subsp. *marginata* - *Corymbia calophylla* - *Allocasuarina fraseriana* - *Banksia* spp. on the erosional spurs off the Darling Scarp to woodland of *Eucalyptus rudis* on the dissecting gullies in humid to semiarid zones. (Mattiske and Havel, 1998).

The vegetation within the application area is open, consisting of scattered jarrah and other non-native eucalyptus species, a mid-storey dominated by **Leptospermum laevigatum*, a few scattered *Allocasuarina fraseriana*, *Adenanthos sericeus*, *Xanthorrhoea preissii* and an understorey of flat weed/veldt grasses (DER, 2016).

The application area was found to be largely impacted by weeds and the surrounding land uses (DER, 2016).

The majority of the vegetation within the application area is in a completely degraded (Keighery, 1994) condition (Strategen Environmental Consultant Pty Ltd, 2016a). One small area (0.09 hectares) of good (Keighery, 1994) condition vegetation was identified along the fenceline running southwest to northwest between the application area and the adjacent Bush Forever Site 53 on Lot 107 (Strategen Environmental Consultant Pty Ltd, 2016b).

The March 2016 flora survey identified two vegetation types within Lot 107 on Diagram 64424, being:

- **Leptospermum laevigatum* thicket over isolated occurrences of Restionaceae species and *Adenanthos obovatus* over exotic grasses on sandy soils; and
- *Eucalyptus marginata*, *Allocasuarina fraseriana* and **Leptospermum laevigatum* open woodland over *Xanthorrhoea preissii* shrubland over exotic grasses on sandy soils (Strategen Environmental Consultant Pty Ltd, 2016a).

Four vegetation types were identified within the remaining areas, being:

- *Banksia menziesii*, *Adenanthos cygnorum*, *Schinus terebinthifolius* and **Leptospermum laevigatum* open woodland over exotic grasses;
- *Eucalyptus marginata*, *Corymbia calophylla*, **Corymbia citriodora*, **Corymbia maculata* and **Leptospermum laevigatum* open woodland over exotic grasses on sandy soil;
- *Corymbia calophylla* open woodland over **Acacia longifolia*, *Xanthorrhoea preissii* closed shrubland over exotic weeds and grasses on sandy soils; and
- parkland cleared vegetation (Strategen Environmental Consultant Pty Ltd, 2016a).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposed clearing is not likely to be at variance to this Principle

The application is for the clearing of 2.59 hectares of native vegetation for the purpose of establishing industrial and hardstand facilities. Clearing Permit CPS 7063/1 authorised the clearing of 0.36 hectares of native vegetation, therefore this amendment is for the additional clearing of 2.23 hectares.

The application area was found to be largely impacted by weeds and the surrounding land uses. As a result of this disturbance, the majority of the vegetation within the application area is in a degraded to completely degraded (Keighery 1994) condition (DER, 2016). One small area (0.09 hectares) of good (Keighery, 1994) condition vegetation was recorded in the north eastern boundary of Lot 107. A flora and vegetation survey undertaken within the application area identified 12 native taxa and 13 introduced species (Strategen Environmental Consultants Pty Ltd, 2016a).

Sixty seven priority flora and 21 rare flora have been recorded within the local area (10 kilometre radius). One rare flora species has previously been recorded within the application area. A flora and vegetation survey undertaken in March 2016 did not identify any rare or priority flora within the application area (Strategen Environmental Consultants Pty Ltd, 2016a). The property in which rare flora had previously been recorded was re surveyed in September 2016 and no rare flora was identified (Strategen Environmental Consultants Pty Ltd, 2016b).

Twelve fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area (10 kilometre radius) (Parks and Wildlife, 2007-). The majority of the vegetation within the application area is in a degraded to completely degraded (Keighery 1994) condition, and has been impacted by the current land uses, and therefore is not likely to contain significant habitat for fauna indigenous to Western Australia.

No priority ecological communities or threatened ecological communities (TEC) have been recorded within the application area. Lot 107 is located adjacent to an occurrence of '*Banksia attenuata* woodland over species rich dense shrublands' (FCT 20a) located within Bush Forever Site 53. The proposed clearing within Lot 107 may indirectly impact this TEC through the spread of weeds and dieback and increased dust. Weed, dieback and erosion management practices will help mitigate this risk.

The majority of the vegetation within the application area is in a degraded to completely degraded (Keighery, 1994) condition, does not contain significant habitat for fauna, rare or priority flora, threatened or priority ecological communities. Therefore the application area is not likely to comprise high biodiversity.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

References:

DER (2016)
Keighery (1994)
Parks and Wildlife (2007-)
Strategen Environmental Consultants Pty Ltd (2016a)
Strategen Environmental Consultants Pty Ltd (2016b)

GIS Datasets:

SAC Bio Datasets – accessed December 2016

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposed clearing is not likely to be at variance to this Principle

Twelve fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area (10 kilometre radius) being: woylie (*Bettongia penicillata* subsp. *ogilbyi*), curlew sandpiper (*Calidris ferruginea*), great knot (*Calidris tenuirostris*), forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroi*), bee (*Leioproctus douglasiellus*), numbat (*Myrmecobius fasciatus*), bee (*Neopasiphae simplicior*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) and quokka (*Setonix brachyurus*) (Parks and Wildlife, 2007-).

Carnaby's cockatoo is listed as endangered and Baudin's cockatoo and forest red-tailed cockatoo are listed as vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). Approximately 11 habitat trees were identified within the survey area, however no hollows suitable for breeding by the black cockatoo species were identified within the application area (Strategen Environmental Consultants Pty Ltd, 2016a).

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 vegetation within the application area may provide foraging habitat for the black cockatoo species, however it is unlikely to comprise significant habitat given the majority is in degraded to completely degraded (Keighery, 1994) condition, and noting the extent of the proposed clearing and the fragmented nature of the application area.

In southwest Western Australia the brush-tailed phascogale has been observed in dry sclerophyll forests and open woodlands that contain hollow-bearing trees (Parks and Wildlife, 2012). Given that the majority of the vegetation within the application area is in degraded to completely degraded (Keighery, 1994) condition, significant habitat for this species is not likely to be present within the application area.

The curlew, sandpiper and great knot are waterbirds and habitat for these species is not located within the application area.

The application area contains little native understorey and therefore is not likely to comprise of significant habitat for ground dwelling fauna including the numbat, woylie, chuditch and quokka.

The native bee species is dependent upon *Goodenia filiformis*, *Anthotium junciforme*, *Goodenia filiformis*, *Lobelia tenuior*, *Angianthus preissianus* and *Velleia* sp. (Department of the Environment and Energy, 2016). As the application area is dominated by exotic flora species, the application area is not likely to provide significant habitat for this species.

The majority of the vegetation within the application area is in a degraded to completely degraded (Keighery, 1994) condition and has been impacted by the current land uses, and therefore is not likely to contain significant habitat for fauna indigenous to Western Australia.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
Commonwealth of Australia (2012)
DER (2016)
Department of the Environment and Energy (2016)
Keighery (1994)
Parks and Wildlife (2007-)
Parks and Wildlife (2012)
Strategen (2016a)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposed clearing is not likely to be at variance to this Principle**
Twenty one rare flora species have been recorded within the local area (10 kilometre radius), with one rare flora species previously being recorded within the application area. This species grows on sand and sandy clay soils, often over laterite, on flat or gently sloping sites. It usually inhabits *Banksia* and eucalypt woodlands over heath, often with *Isopogon drummondii*, *Hakea conchifolia* and *Lambertia multiflora* (Brown et al., 1998).

A flora and vegetation survey undertaken within the application area in March 2016 did not identify any rare flora (Strategen Environmental Consultants Pty Ltd, 2016a). The flora and vegetation survey indicated that remnant native species were largely restricted to overstorey species (*Corymbia calophylla* and *Eucalyptus marginata*) (Strategen Environmental Consultants Pty Ltd, 2016a).

Although no rare flora was identified within the March flora survey, the abovementioned flora species flowers between May and October and therefore an additional survey was conducted in September 2016. The September flora survey did not identify any rare flora species (Strategen Environmental Consultants Pty Ltd, 2016b).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
Brown et al. (1998)
Strategen Environmental Consultants Pty Ltd (2016a)
Strategen Environmental Consultants Pty Ltd (2016b)

GIS Datasets:
SAC Bio Datasets – accessed December 2016

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposed clearing may be at variance to this Principle**
Eleven TECs have been recorded within the local area (10 kilometre radius), six of which are located adjacent to or within close proximity to the application area being:

- *Corymbia calophylla* - *Kingia australis* woodlands on heavy soils, Swan Coastal Plain;
- Shrublands and woodlands of the eastern side of the Swan Coastal Plain;
- *Banksia attenuata* woodland over species rich dense shrublands;
- Shrublands on dry clay flats;
- *Corymbia calophylla* - *Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain; and
- Herb rich shrublands in clay pans.

Lot 107 is located adjacent to a mapped occurrence of TEC '*Banksia attenuata* woodland over species rich dense shrublands' (FCT 20a), which occurs within Bush Forever Site 53.

Lot 107 has been largely cleared and heavily impacted and therefore no significant impacts to the adjacent TEC are expected to result from the proposed clearing. However, the proposed clearing may indirectly impact the adjacent TEC through increased dust, weeds, rubbish and impacts to hydrology (Parks and Wildlife, 2016). Weed, dieback and drainage management practices and a requirement to commence works within one month of undertaking clearing will help mitigate impacts of weeds, dieback, hydrology and dust.

Lot 4 is located within 20 metres of a mapped occurrence of TEC '*Corymbia calophylla* - *Kingia australis* woodlands on heavy soils, Swan Coastal Plain', however this occurrence has been approved to be cleared under Clearing Permit CPS 6410/1.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology References:
Parks and Wildlife (2016)

GIS Datasets:
SAC Bio Datasets – accessed December 2016

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposed clearing is not likely to be at variance to this Principle

The application area is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 39 per cent of its pre-European vegetation extent remaining (Government of Western Australia, 2015).

The vegetation within the application area is mapped as Beard vegetation association 968, Heddle vegetation complex Guildford and Mattiske vegetation complex Fo, which retain approximately 7, 5 and 12 per cent of their pre-European extents within the Swan Coastal Plain bioregion respectively (Government of Western Australia, 2015).

The application area is located within the City of Gosnells, within which there is approximately 28 per cent pre-European vegetation extent remaining (Government of Western Australia, 2015). The local area (10 kilometre radius) retains approximately 15 per cent vegetation.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Within constrained areas (areas of urban development in cities and major towns) on the Swan Coastal Plain, the target for representation of the pre-clearing extent of a particular native vegetation complex is 10 per cent (Environmental Protection Authority, 2008).

The mapped Beard vegetation association and Heddle vegetation complex retain less than the recommended 10 per cent threshold and therefore the application area is considered to be in an extensively cleared area.

The majority of the vegetation within the application area is in a degraded to completely degraded (Keighery, 1994) condition, does not contain high biological diversity, significant habitat for fauna, rare or priority flora, or threatened or priority ecological communities and therefore is not considered to be a significant remnant of native vegetation.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,222	579,162	39	37
Local government*				
City Of Gosnells	12,715	3,580	28	17
Beard vegetation association in Bioregion*				
968	136,188	9,052	7	19
Hedde vegetation complex**				
Guildford complex	92,497	4,963	5	0.4
Mattiske vegetation complex**				
Fo	11,594	1,445	12	2

Methodology References:
Commonwealth of Australia (2001)
Environmental Protection Authority (2008)
*Government of Western Australia (2015)
Keighery (1994)
** Parks and Wildlife (2015)

GIS Datasets:
Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposed clearing may be at variance to this Principle

No watercourses are located within the application area. A small portion (0.05 hectares) of a multiple use wetland is mapped on the boundary of Lot 107. A multiple use wetland is also mapped over Lots 3, 4 and 5. Multiple use wetlands have few important ecological attributes and functions remaining (Water and Rivers Commission, 2001).

A conservation category wetland is located approximately 20 metres from Lot 107. This wetland is approximately six hectares in size. Conservation category wetlands support a high level of attributes and functions and are the highest priority for protection (Water and Rivers Commission, 2001). Wetlands that are to be conserved require a buffer to protect them from potential adverse impacts and maintain ecological processes and function with the wetland. The width of the buffer should be determined based on the values of the wetland to be protected and the threats posed by the adjacent land use. A minimum 50 metre buffer is recommended to conservation category wetlands.

The City of Gosnells advised that the conservation category wetland may occur within a small portion of Lot 107 (City of Gosnells, 2016). A flora survey of Lot 107 conducted in September 2016 did not identify any typical indicator species that would be expected to commonly occur in wetlands of the Swan Coastal Plain (Strategen Environmental Consultants Pty Ltd, 2016b).

The Department of Parks and Wildlife (Parks and Wildlife) advised that the conservation category wetland is identified in the Mungala consanguineous suite (natural wetland group). Only 4.1 per cent of the palusplain area within the Mungala suite retains conservation category wetland values. Palusplain wetlands within the Mungala suite have been significantly degraded or lost, and the cumulative impact from incremental clearing will exacerbate the loss of wetland function and values (Parks and Wildlife, 2017).

Although no riparian vegetation was observed within the application area, wetlands are mapped over the application area and therefore the proposed clearing may be at variance to this Principle. Considering the extent of the proposed clearing and the predominately degraded to completely degraded (Keighery, 1994) condition of the vegetation within the application area, and noting the implementation of weed, dieback and drainage management practices, the proposed clearing is unlikely to have a significant impact on the wetland values.

Methodology References:
City of Gosnells (2016)
Keighery (1994)
Parks and Wildlife (2017)
Strategen Environmental Consultants Pty Ltd (2016b)
Water and Rivers Commission (2001)

GIS Databases:
Hydrology, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposed clearing may be at variance to this Principle**
Mapped soil type Wd6 is described as: plain: chief soils are sandy acidic yellow mottled soils, some of which contain ironstone gravel, and in some deeper varieties soils are now forming, associated are acid yellow earths (Northcote et al., 1960-68).

No watercourses have been mapped within the application area, however the application area is mapped within a multiple use wetland. Given the sandy soils and relatively flat topography of the application area the proposed clearing is not likely to cause land degradation in the form of water erosion.

The proposed clearing on sandy soils may cause land degradation in the form of wind erosion if left cleared and undeveloped for an extended period of time. A requirement to commence works within one month of undertaking clearing will help mitigate wind erosion.

Given the above, the proposed clearing may be at variance to this Principle.

Methodology References:
Northcote et al. (1960-68)

GIS Datasets:
Soils, Statewide
Hydrology, linear
Geomorphic Wetlands, (Mgt Categories)
Topographic contours

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposed clearing may be at variance to this Principle**
A number of conservation areas have been recorded within the local area (10 kilometre radius), the closest being Bush Forever Site 53 located adjacent to Lot 107.

The proposed clearing may indirectly impact this conservation area through the spread of weed and dieback. Weed and dieback management practices will help mitigate this risk. The requirement to construct a fence between Lot 107 and the adjacent Bush Forever Site 53 will assist to further mitigate impacts to this conservation area.

No ecological linkages are expected to be disrupted as a result of the proposed clearing.

Given the above, the proposed clearing may be variance to this Principle.

Methodology GIS Datasets:
Bush Forever
Parks and Wildlife Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposed clearing may be at variance to this Principle**
No watercourses are located within the application area. A small portion (0.05 hectares) of a multiple use wetland is mapped on the boundary of Lot 107. A multiple use wetland is also mapped over Lots 3, 4 and 5. Multiple use wetlands have few important ecological attributes and functions remaining (Water and Rivers Commission, 2001).

Lots 3, 4 and 5 are in a degraded to completely degraded (Keighery, 1994) condition, therefore the proposed clearing is not likely to cause deterioration in the quality of surface water of the mapped multiple use wetland.

A conservation category wetland is located approximately 20 metres from Lot 107. The City of Gosnells advised that the conservation category wetland may occur within a small portion of Lot 107 (City of Gosnells 2016). A flora survey, of Lot 107, conducted in September 2016 did not identify any typical indicator species that would be expected to commonly occur in wetlands of the Swan Coastal Plain (Strategen Environmental Consultants Pty Ltd, 2016b).

The proposed clearing may cause sedimentation and runoff into this nearby conservation category wetland. Conservation category wetlands support a high level of attributes and functions and are the highest priority for protection (Water and Rivers Commission, 2001). Wetlands that are to be conserved require a buffer to protect them from potential adverse impacts and maintain ecological processes and function with the wetland. The width of the buffer should be determined based on the values of the wetland to be protected and the threats posed by the adjacent land use. A minimum 50 metre buffer is recommended to conservation category wetlands.

The applicant advised that the clearing of Lot 107 is unlikely to impact the values of the wetland mapped within the adjacent Bush Forever Site 53, for the following reasons:

- lack of groundwater and surface water connectivity between the two sites, as surface water in the Bush Forever site and groundwater within the Survey Area flow approximately north to south;
- no increase or change in surface water in Bush Forever Site 53 resulting from construction, as the proposed development of the Survey Area will involve construction of hardstand over the entire site, from which surface water hardstand will be treated and drained to the south;
- the association of Lot 107 and the adjacent Bush Forever has been severed or degraded for over 40 years; the site was cleared between 1964 and 1974, potentially for sand mining purposes; the site remained devoid of vegetation until regeneration occurred between 1985 and 1995; since 1995 the site has remained in a degraded and predominantly cleared state; the site remains in a predominantly degraded state and is unlikely to act as an effective buffer to the wetland due to the fact that the Survey Area is predominantly cleared and revegetated with introduced species; and
- in addition to drainage, the design of the development on Lot 107 can include structures to manage interaction with the adjacent Bush Forever Site 53 (Strategen Environmental Consultants Pty Ltd, 2016b).

Drainage management practices not allowing the discharge of sediments into the adjacent Bush Forever Site 53 will help to ensure that surface water quality of the nearby conservation category wetland will not be negatively impacted by the proposed clearing or end land use.

Groundwater salinity is mapped between 500-1,000 total dissolved solids (milligrams per litres). Given that the proposed clearing occurs over six properties containing vegetation in a predominately degraded to completely degraded (Keighery, 1994) condition the proposed clearing is not likely to cause deterioration in the quality of underground water.

Given the above, the proposed clearing may be at variance to this Principle. The implementation of suitable drainage management practices will help to mitigate impacts to the nearby conservation category wetland.

Methodology References:
City of Gosnells (2016)
Keighery (1994)
Strategen Environmental Consultants Pty Ltd (2016b)
Water and Rivers Commission (2001)

GIS Datasets:
Geomorphic Wetlands, (Mgt Categories)
Groundwater Salinity Statewide
Hydrography linear

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposed clearing is not likely to be at variance to this Principle**
Given the absence of watercourses, the relatively flat profile of the local landscape and the predominance of well drained sandy soils, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Datasets:
Soils, Statewide
Hydrology, linear
Geomorphic Wetlands, (Mgt Categories)

Planning instruments and other relevant matters.

Comments Planning approval was issued for Lots 3, 4 and 5 on 10 March 2016 in accordance with Clause 11.3 of the City of Gosnells Town Planning Scheme No. 6 and Clause 68 (2) of the Planning and Development (Local Planning Schemes) Regulation 2015 – Schedule 2 – Deemed Provisions, for a Distribution Centre and a road connection between Clifford Street and Bickley Road (City of Gosnells, 2016).

The City of Gosnells issued Development Approval for Lots 105 and 107 on 28 February 2017 (City of Gosnells, 2017).

The application to amend CPS 7063/1 initially included Lot 103 on Diagram 62957 and Lot 101 on Diagram 61994, Maddington. During assessment it was identified that these properties had already been cleared. The alleged unlawful clearing of Lots 103 and Lot 101 has been referred to DER's Environmental Enforcement group and has been allocated the reference ICMS 43102.

On 19 December 2016 the application was advertised in *The West Australian* newspaper for a 7 day submission period. No submissions have been received in relation to this application.

No Aboriginal Sites of Significance are mapped within the application area.

According to available datasets the application area is mapped as 'Industrial' in the Draft Perth and Peel Green Growth Plan for 3.5 million (dated December 2015).

Methodology References:
City of Gosnells (2016)
City of Gosnells (2017)

GIS Datasets:
Aboriginal Sites of Significance

4. References

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