



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6020/1
Permit Holder:	Main Roads Western Australia
Duration of Permit:	18 October 2014 – 18 October 2024

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 constructing roads, construction camps, bore sites, gravel pits and laydown areas.

2. Land on which clearing is to be done

Lot 182 on Deposited Plan 28412, Manilya
Lot 285 on Deposited Plan 30477, Manilya
Lot 179 on Deposited Plan 220605, Lyndon
Lot 286 on Deposited Plan 30478, Lyndon
Lot 287 on Deposited Plan 30479, Lyndon
Lot 174 on Deposited Plan 220553, Lyndon
Lot 158 on Deposited Plan 189075, Lyndon
Lot 171 on Deposited Plan 238297, Lyndon
Lot 289 on Deposited Plan 30480, Exmouth Gulf
Lot 190 on Deposited Plan 227904, Exmouth Gulf
Lot 290 on Deposited Plan 30480, Exmouth Gulf
Lot 288 on Deposited Plan 30480, Yannarie
Lot 172 on Deposited Plan 238297, Yannarie
Lot 165 on Deposited Plan 220784, Yannarie
Lot 320 on Deposited Plan 68269, Yannarie
Lot 291 on Deposited Plan 30481, Yannarie
Lot 292 on Deposited Plan 30482, Yannarie
Lot 293 on Deposited Plan 30483, Yannarie
Lot 170 on Deposited Plan 220393, Yannarie
Great Northern Highway road reserve (PIN 11738178, PIN 11709079, PIN 11709078, PIN 11709084, PIN 11709077, PIN 11728370, PIN 11728371, PIN 11728372, PIN 11728379, PIN 11728380, PIN 11730981, PIN 11728394, PIN 11728407, PIN 11728405, PIN 11709012, PIN 11730661, PIN 11728402), Manilya, Lyndon, Yannarie, and Exmouth Gulf.

3. Area of Clearing

The Permit Holder must not clear more than 812 hectares of native vegetation within the combined areas hatched yellow on attached Plan 6020/1a, Plan 6020/1b, Plan 6020/1c, Plan 6020/1d, Plan 6020/1e, Plan 6020/1f, and Plan 6020/1g.

4. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 18 October 2019.

5. 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.

6. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the project activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those *project activities* under the *Main Roads Act 1930*, *Land Administration Act 1997* or any other written law.

PART II – MANAGEMENT CONDITIONS

7. 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*:

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

8. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) at an *optimal time* following clearing authorised under this Permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) laying the vegetative material and topsoil retained under condition 8(a) on the cleared area(s).
- (c) within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 8(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 8(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.
- (d) Where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 8(c)(ii) of this permit, the Permit Holder shall repeat condition 8(c)(i) and 8(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) Where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 8(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 8(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 8(c)(ii).

PART III - RECORD KEEPING AND REPORTING

9. 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 species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).

- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 8 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, 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) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
 - (v) a copy of the environmental specialist's report.

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 18 July 2024, 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:

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;

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

local provenance means native vegetation seeds and propagating material from natural sources within 100 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;

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 November to December for undertaking *direct seeding*;

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

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing mulch;

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

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;

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.

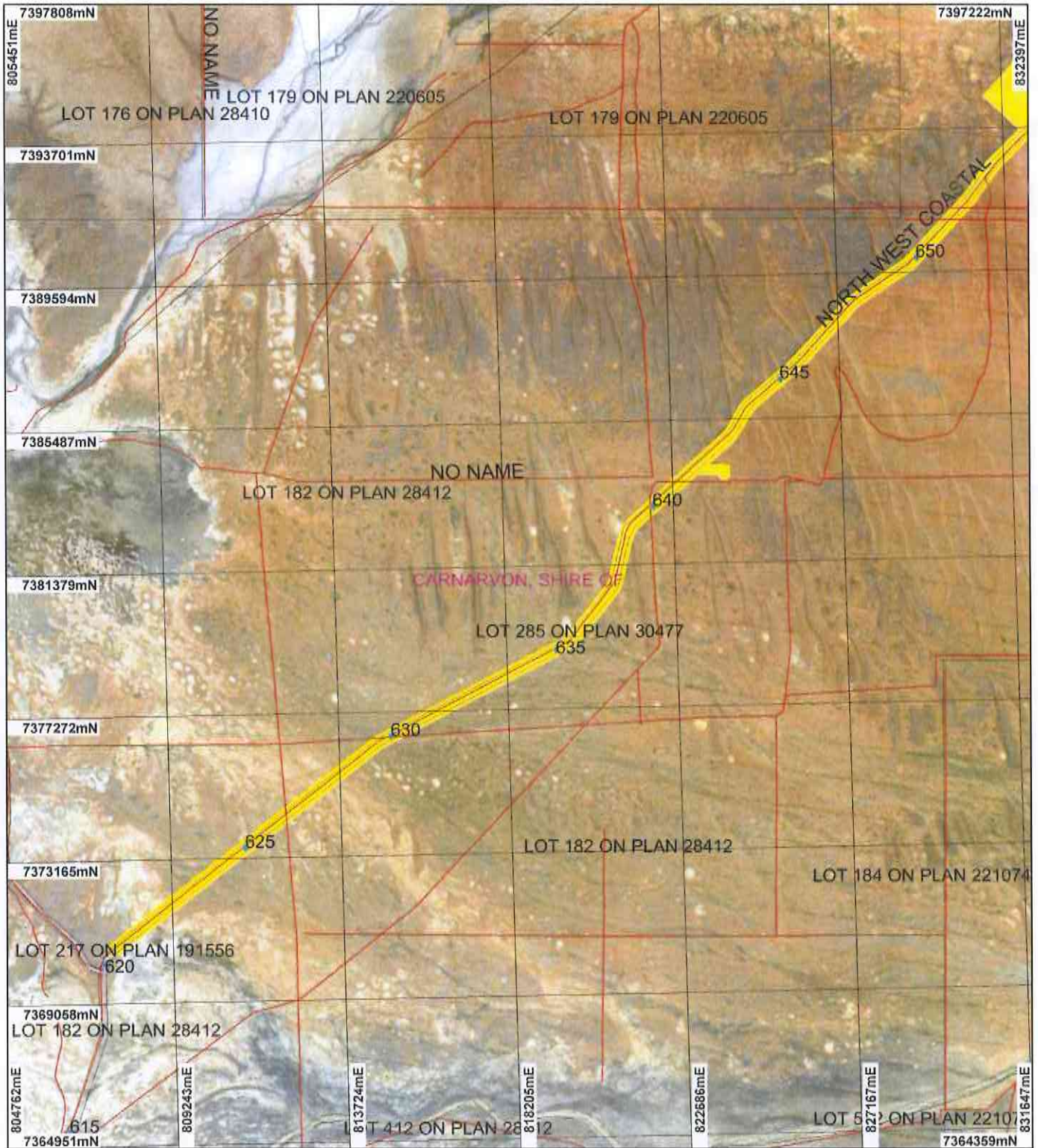


M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

18 September 2014

Plan 6020/1a



LEGEND

Local Government Authorities

Western Australia Landsat Mosaic 25m - AGO 2006

Clearing Instruments

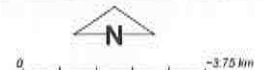
Areas Approved to Clear

Road Centrelines

Straight Road Kilometres (5km interval)

• HIGHWAY
• MAIN ROAD

Cadastre for labelling



Scale 1:150000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date 18/9/11
M Warnock

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

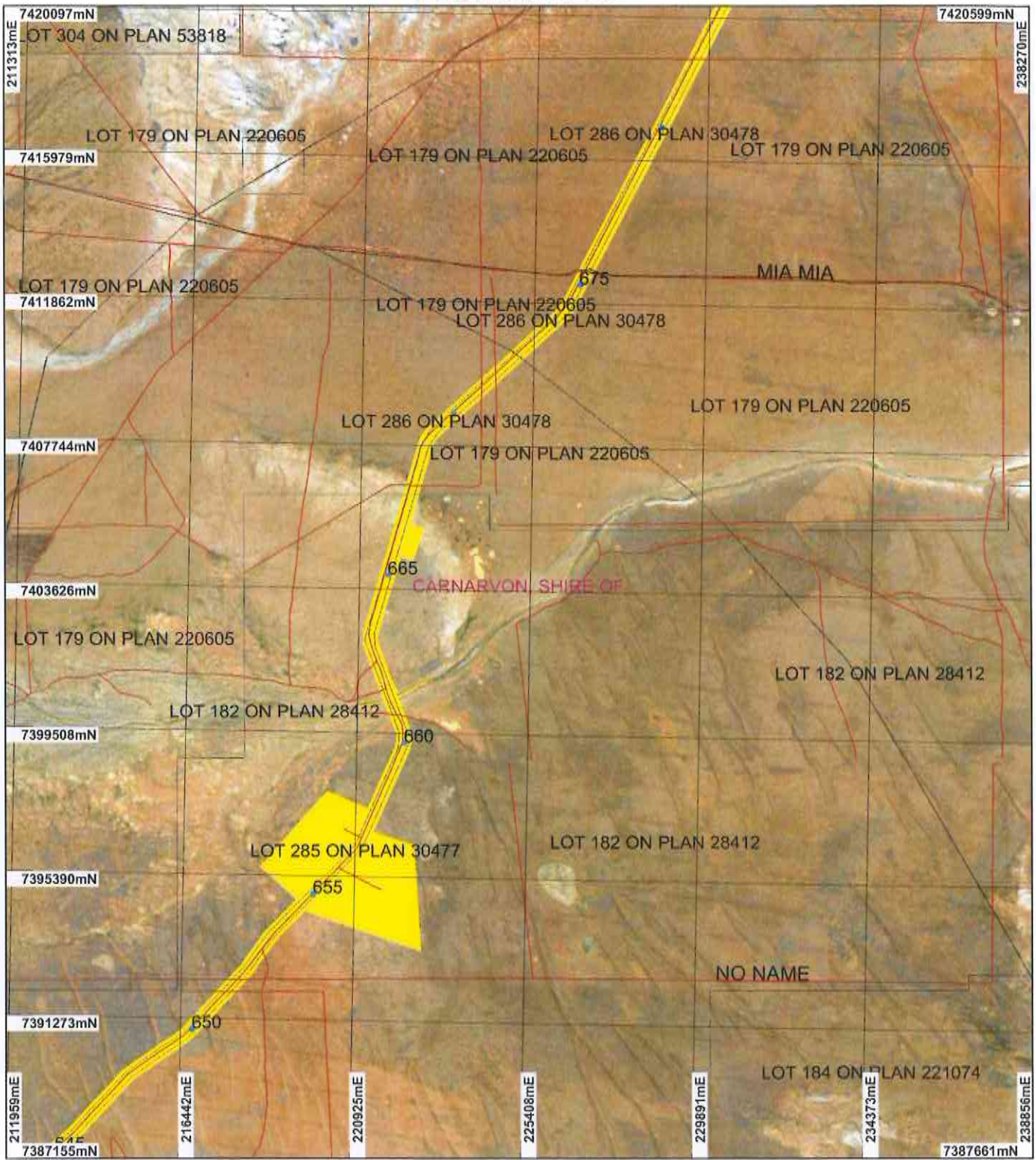
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Plan 6020/1b



LEGEND

<p>Local Government Authorities</p> <p>Western Australia Landsat Mosaic 25m - AGO 2006</p> <p>Clearing Instruments</p> <p>■ Areas Approved to Clear</p>	<p>Road Centrelines</p> <p>Straight Road Kilometres (5km interval)</p> <p>● HIGHWAY</p> <p>● MAIN ROAD</p>	<p>Cadastre for labelling</p>
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(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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M Warnock Date 18/9/14
M Warnock

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

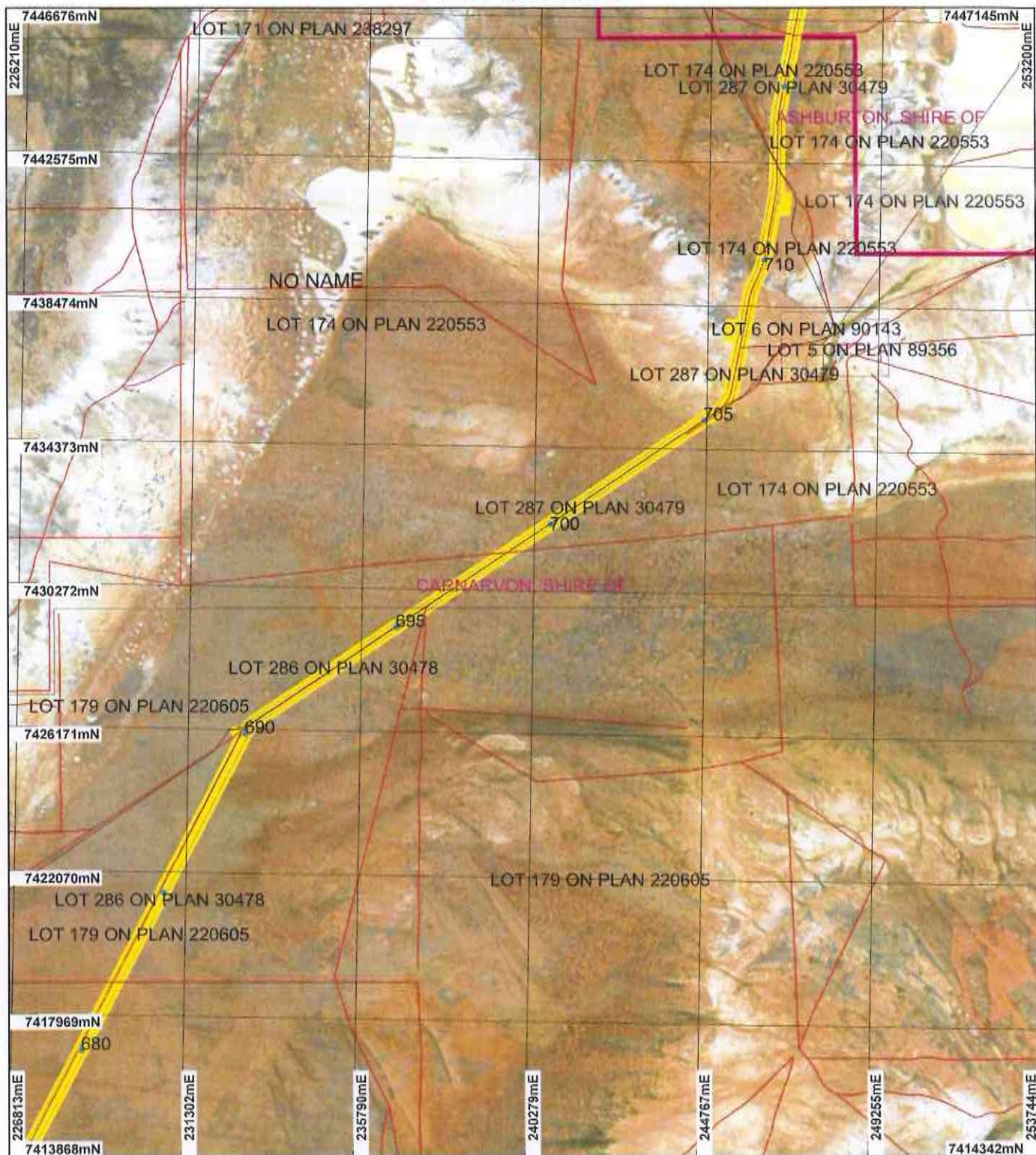
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Department of Environment Regulation

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Plan 6020/1c



LEGEND

<p>Local Government Authorities</p> <p>Western Australia Landsat Mosaic 25m - AGO 2006</p> <p>Clearing Instruments</p> <p>■ Areas Approved to Clear</p>	<p>Road Centrelines</p> <p>Straight Road Kilometres (5km interval)</p> <p>● HIGHWAY</p> <p>● MAIN ROAD</p>	<p>Cadastre for labelling</p>
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Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date: 18/9/14

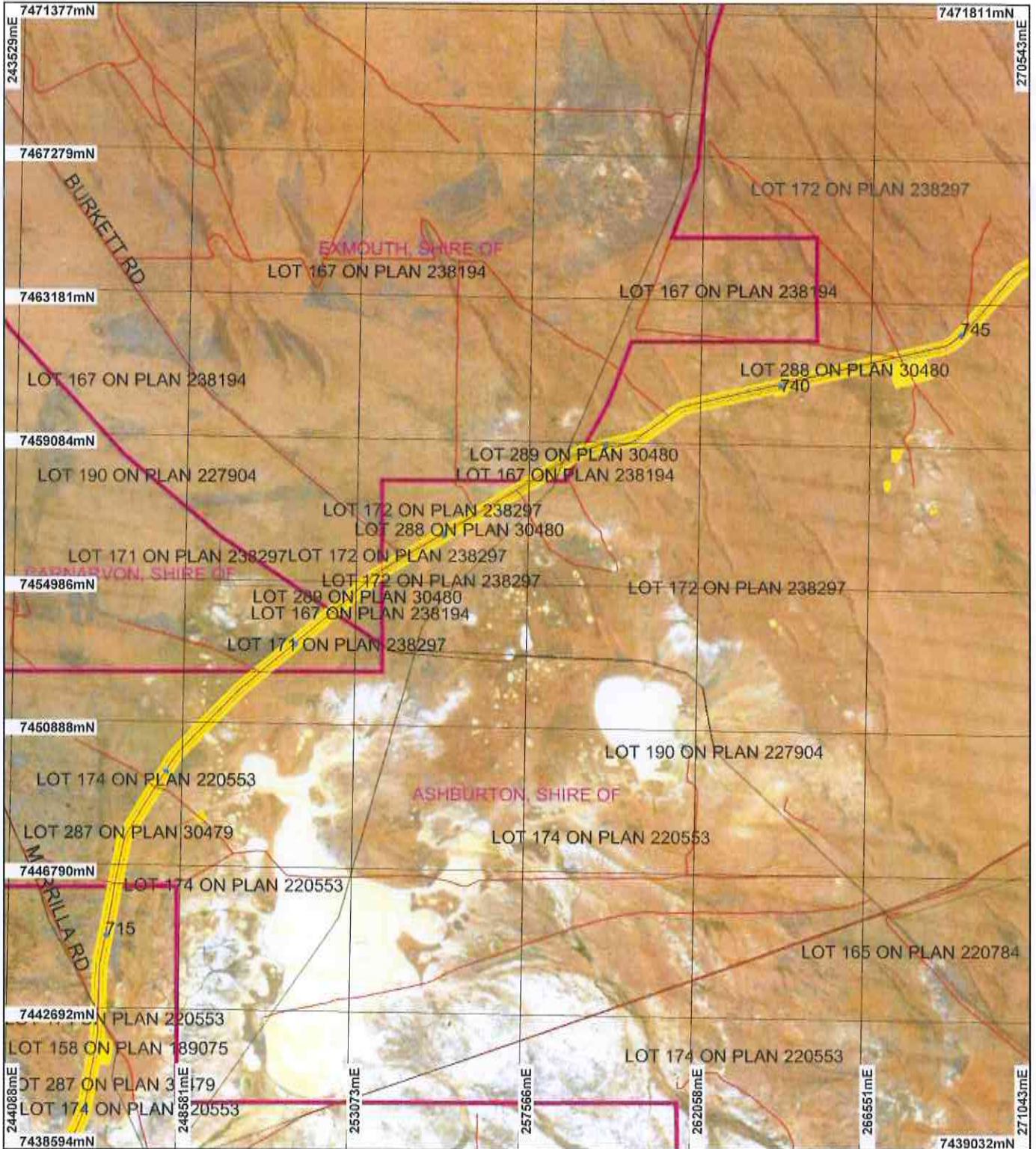
M Warnock
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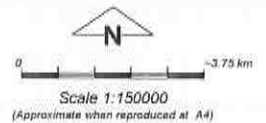
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 6020/1d



LEGEND

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| <p>Local Government Authorities</p> <p>Western Australia Landsat Mosaic 25m - AGO 2006</p> <p>Clearing Instruments</p> <p>■ Areas Approved to Clear</p> | <p>Road Centrelines</p> <p>Straight Road Kilometres (5km interval)</p> <p>● HIGHWAY</p> <p>● MAIN ROAD</p> | <p>Cadastre for labelling</p> |
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Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date 18/9/16
M Warnock

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

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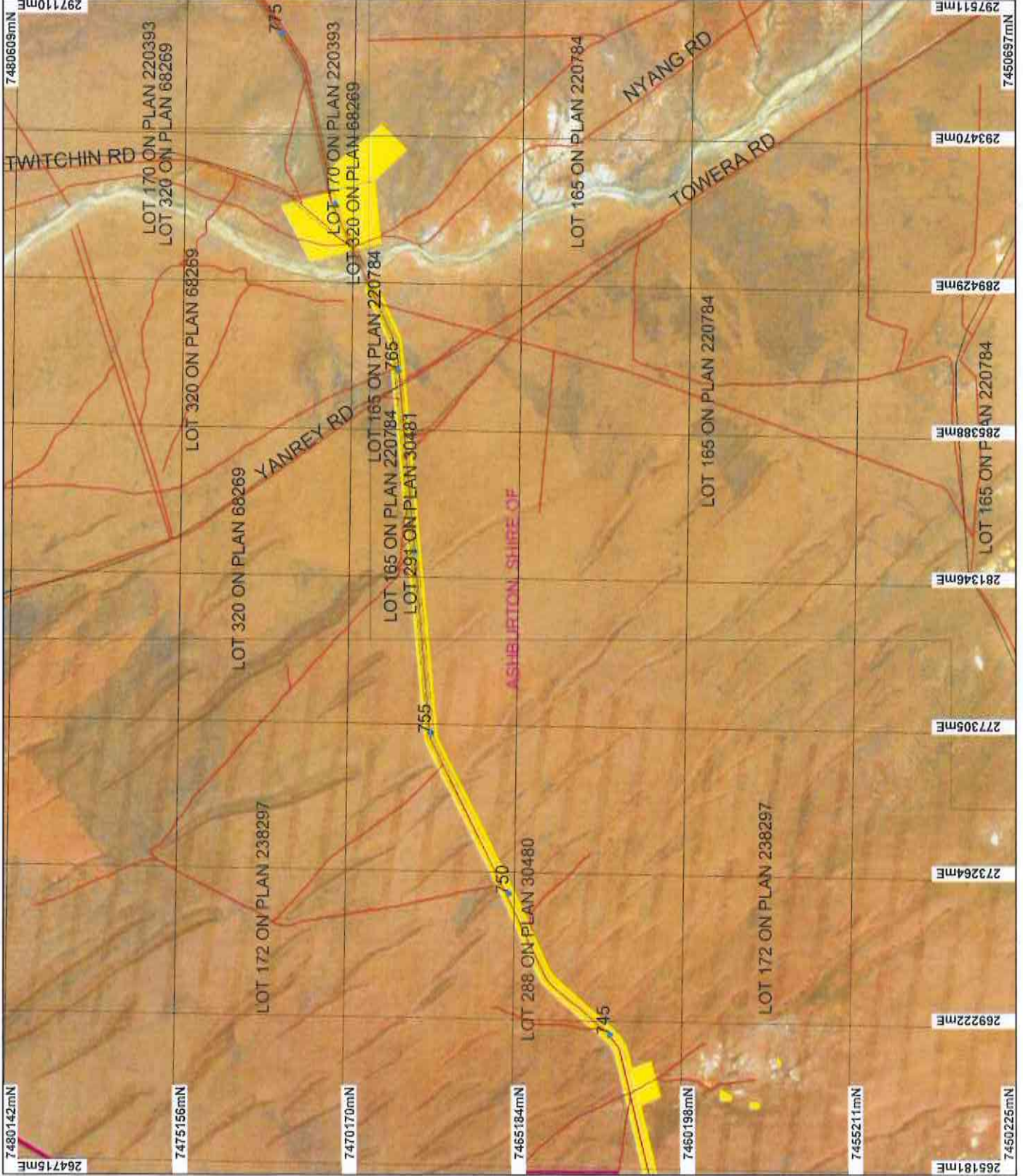


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Plan 6020/1e



LEGEND

- Local Government Authorities
Western Australian Landmark Mosaic 25m - AGO 2006
- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Straight Road Kilometres (5km interval)
- HIGHWAY
- MAIN ROAD
- Cadastre for labelling

• Project Data is denoted by asterisk.
This data has not been quality assured.
Please contact map author for details.

0 0 3.75 km

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(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map has not been inspected. This may result in planometric distortion or measurement inaccuracies.

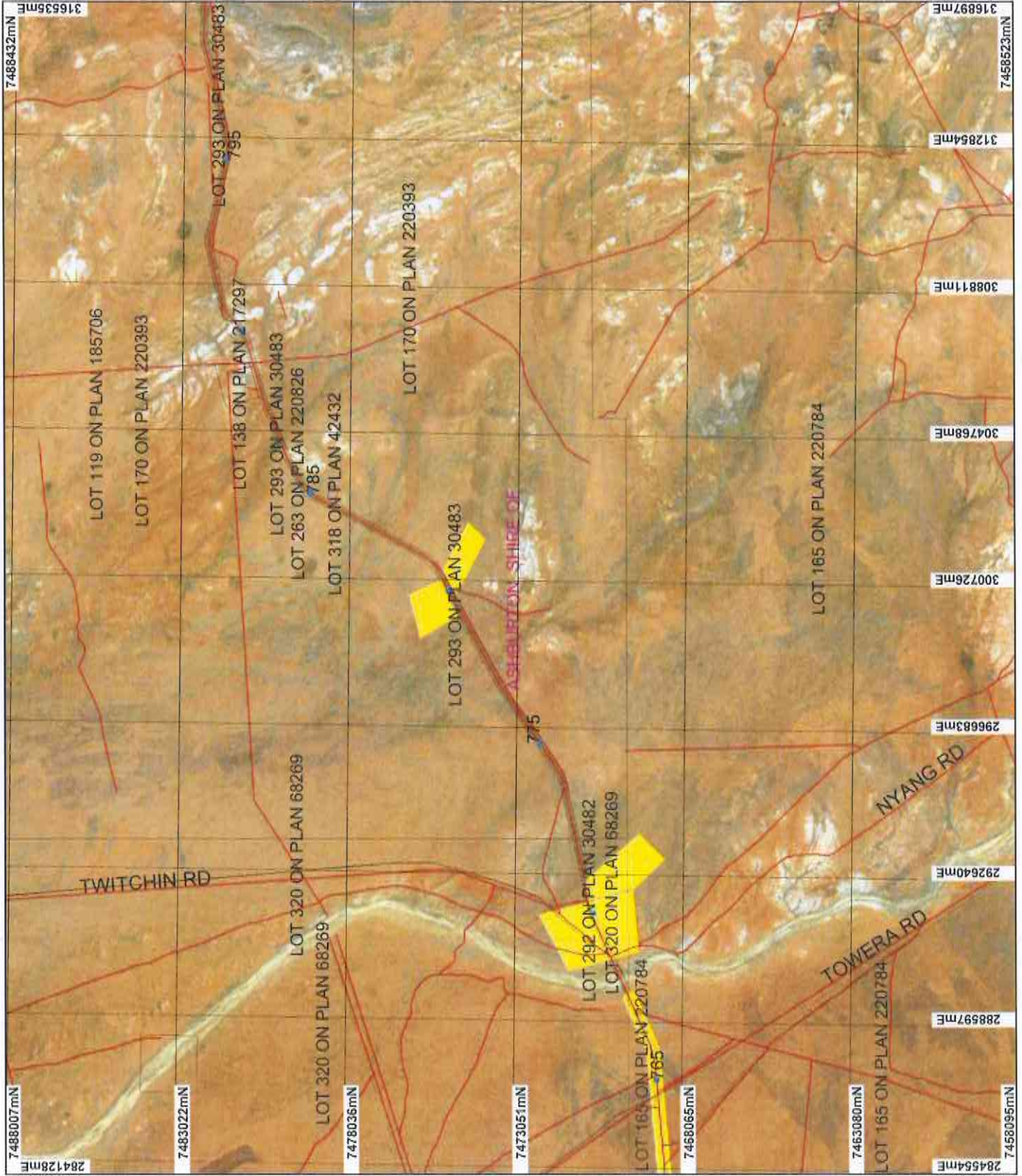
M. Wainman 18/9/14
M. Wainman

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

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Plan 6020/1f



LEGEND

- Local Government Authorities
Aerial Imagery
AGO 2006
- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Straight Road Kilometres (5km interval)
- HIGHWAY
- MAIN ROAD
- Cartastre for labelling

* Project Data is denoted by asterisk.
This data has not been quality assured.
Please contact map author for details.



0 3.75 km

Scale 1:150078

(Microstate was reproduced at A4)

Geocentric Datum Australia 1994

Note: All data in this map have not been
projected. This may result in geometric
distortion or measurement inaccuracies.

M. Warnock Date 18/9/14

M Warnock

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

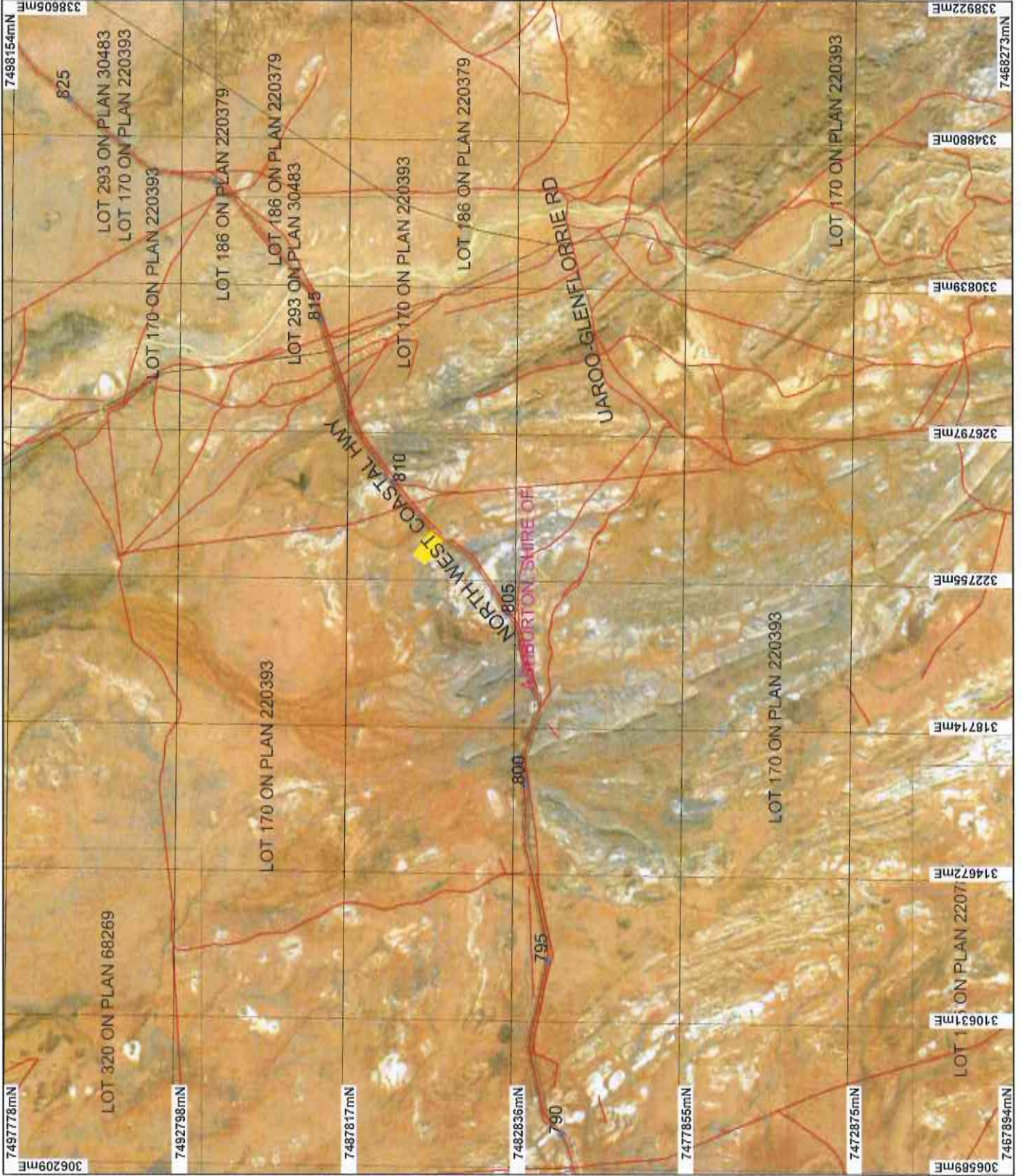
Information derived from this map should be
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Department of Environment Regulation

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Plan 6020/1g



LEGEND

- West Coast Survey Authority
Geometric Datum Australia 1994
AGD 2006
Clearing Instruments
- Items Approved to Clear
- Straight Road Kilometres (5km interval)
- ROADWAY
- MAIN ROAD
- Cadastral for labelling
- Road Centrelines

* Project Data is denoted by asterisk.
This data has not been quality assured.
Please contact map author for details.



0 3.75 km

Scale 1:150000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M. Waincock Date 18/9/16

M. Waincock

Officer, who delegated authority under Section 20 of the Environmental Protection Act 1986.

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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6020/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Commissioner of Main Roads WA

1.3. Property details

Property:
ROAD RESERVE (EXMOUTH GULF 6707)
LOT 286 ON PLAN 30478 (LYNDON 6701)
ROAD RESERVE (LYNDON 6701)
LOT 179 ON PLAN 220605 (LYNDON 6701)
LOT 287 ON PLAN 30479 (LYNDON 6701)
LOT 174 ON PLAN 220553 (LYNDON 6701)
ROAD RESERVE (LYNDON 6701)
LOT 288 ON PLAN 30480 (LYNDON 6701)
LOT 289 ON PLAN 30480 (EXMOUTH GULF 6707)
ROAD RESERVE (YANNARIE 6710)
ROAD RESERVE (EXMOUTH GULF 6707)
LOT 172 ON PLAN 238297 (Lot No. 172 NORTH WEST COASTAL YANNARIE 6710)
ROAD RESERVE (YANNARIE 6710)
LOT 292 ON PLAN 30482 (YANNARIE 6710)
ROAD RESERVE (YANNARIE 6710)
LOT 320 ON PLAN 68269 (YANNARIE 6710)
ROAD RESERVE (YANNARIE 6710)
LOT 170 ON PLAN 220393 (YANNARIE 6710)
LOT 293 ON PLAN 30483 (YANNARIE 6710)
LOT 170 ON PLAN 220393 (YANNARIE 6710)
LOT 165 ON PLAN 220784 (Lot No. 165 NORTH WEST COASTAL YANNARIE 6710)
LOT 174 ON PLAN 220553 (LYNDON 6701)
LOT 158 ON PLAN 189075 (LYNDON 6701)
LOT 286 ON PLAN 30478 (LYNDON 6701)
ROAD RESERVE (LYNDON 6701)
LOT 286 ON PLAN 30478 (LYNDON 6701)
ROAD RESERVE (MINILYA 6701)
LOT 285 ON PLAN 30477 (MINILYA 6701)
LOT 182 ON PLAN 28412 (MINILYA 6701)
ROAD RESERVE (YANNARIE 6710)
LOT 290 ON PLAN 30480 (EXMOUTH GULF 6707)

Local Government Area: Shires of Carnarvon, Exmouth and Ashburton.
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
812		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 September 2014

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
<p>The vegetation under application is mapped as Beard vegetation association's (Shepherd et al, 2001):</p> <ul style="list-style-type: none"> • 95. Hummock grasslands, shrub steppe; acacia and grevillea over <i>Triodia basedowii</i>. • 98. Hummock grasslands, shrub steppe; kanji over soft spinifex and <i>Triodia basedowii</i>. • 152. Hummock grasslands, grass steppe; soft and hard spinifex soft spinifex. • 264. Low woodland; <i>Acacia victoriae</i> and snakewood • 307. Low woodland; bowgada and <i>Acacia subtressarogona</i>. • 641. Medium woodland; coolabah and river gum. • 1162. Hummock grasslands, grass steppe; hard spinifex <i>Triodia wiseana</i> and <i>T. basedowii</i>. • 1322. Shrublands; <i>Acacia sclerosperma</i>, <i>A. victoriae</i> and snakewood scrub. • 1601. Mosaic: Shrublands; snakewood and <i>A. victoriae</i> scrub / Hummock grasslands; grass steppe, hard spinifex, <i>Triodia basedowii</i>. • 2675. Hummock grasslands, low tree and shrub steppe; scattered eucalypts, kanji over <i>Triodia pungens</i> and <i>T. basedowii</i>. 	<p>To clear up to 812 hectares of native vegetation within North West Coastal Hwy road reserve and adjoining pastoral leases for the purpose of road widening, construction of temporary construction camps, gravel pits and bore sites.</p>	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994).</p> <p>To</p> <p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994).</p>	<p>The condition of the vegetation under application was determined via biological surveys conducted by GHD in 2013 (GHD, 2013).</p>

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The application is to clear up to 812 hectares of native vegetation within North West Coastal Highway road reserve and adjoining pastoral leases for the purpose of road widening, construction of temporary construction camps, gravel pits and bore sites.

The landscape surrounding the application area is highly vegetated retaining approximately 99 percent native vegetation. A flora survey of the application area determined that the vegetation is in an excellent to completely degraded (Keighery, 1994) condition (GHD, 2013).

A fauna survey of the application area noted three priority four (P4) fauna species associated with the application area (GHD, 2013). Given the linear nature of a majority of the proposed clearing, the mobility of the species in question, and the extensive vegetation adjoining the application area, it is not likely that the application area represents an area of high fauna diversity.

A flora survey of the application area (GHD, 2013) recorded two priority flora species (P3 and P4). These species are both known from numerous locations and have broad distributions. Given this and the linear nature of the proposed clearing they are not likely to be significantly impacted by the proposed clearing (Parks and Wildlife, 2014).

A priority 1 flora species has been mapped within the application area. This species is known from only one collection in the Western Australian Herbarium, from 1965. Given the lack of a recent collection, linear nature of the proposed clearing and as the species wasn't recorded during the flora survey, the likelihood of further surveys relocating the population is low (Parks and Wildlife, 2014).

Given the above, the application is not likely to be at variance to this clearing principle.

Methodology

References:

GHD (2013)
Parks and Wildlife (2014)
Keighery (1994)

GIS Datasets:

- SacBiodataSets - accessed July 2014

(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 Proposal is not likely to be at variance to this Principle

The landscape surrounding the application area is highly vegetated retaining approximately 99 percent native vegetation. Given this, the application area is not likely to be significant in the movement of fauna through the landscape. As clearing and revegetation will be undertaken incrementally, fauna located within the application area are likely to relocate into the surrounding vegetation and not be significantly affected.

GHD (2013) conducted a fauna survey of the application area during which a pebble mound mouse (*Pseudomys chapmani*) mound and Australian bustard (*Ardeotis australis*) were recorded within vegetation adjoining the application area. A previous fauna survey undertaken by GHD in 2012 also recorded the bush stone-curlew (*Burhinus grallarius*) in vegetation adjoining the application area (GHD, 2013). These species are listed as priority 4 by the Department of Parks and Wildlife.

The presence of the pebble mound mouse (*Pseudomys chapmani*) within an area is highly correlated to the presence of active mounds (Parks and Wildlife, 2014). The application area is likely to contain suitable habitat for this species and it is highly likely to be present within the surrounding landscape. As no active mounds were recorded during the survey, it is not likely that the application area includes significant habitat for this species (Parks and Wildlife, 2014). Staged clearing is also likely to reduce the likelihood of impacts to these species.

The Australian bustard (*Ardeotis australis*) and bush stone-curlew (*Burhinus grallarius*) are both highly mobile avian species with large home ranges. Given this and the linear nature of a majority of the vegetation under application they are not likely to be significantly impacted by the proposed clearing.

Given the above, the application is not likely to be at variance to this clearing principle.

Methodology References:

GHD (2013)
Parks and Wildlife (2014)

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

Comments Proposal is not at variance to this Principle

The closest record of rare flora falls over 200 kilometres from the application area. A flora survey undertaken by GHD in 2013 did not reveal the presence of rare flora (GHD, 2013).

Given the above, the application is not at variance to this principle.

Methodology Reference:

GHD (2013)

GIS Databases:
- SAC Biodatasets - accessed July 2014

(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 Proposal is not at variance to this Principle

The closest recorded threatened ecological community (TEC) falls over 100 kilometres from the application area. A flora survey undertaken by GHD in 2013 did not record vegetation consistent with a TEC (GHD, 2013).

Given the above, the application is not at variance to this principle.

Methodology Reference:

GHD (2013)

GIS Databases:
- SAC Biodatasets - accessed July 2014

(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 Proposal is not at variance to this Principle

The area under application is located within the Carnarvon and Gascoyne Interim Biogeographic Regionalisation of Australia (IBRA) bioregions. These IBRA bioregions retain approximately 99 percent of their pre-European vegetation extents (Government of Western Australia, 2013).

The vegetation under application is mapped within ten Beard vegetation association's all of which retain approximately 99 percent of their pre-European extent remaining within the Carnarvon and Gascoyne bioregions (Government of Western Australia, 2013).

The area under application is located within the Shires of Carnarvon, Exmouth and Ashburton all of which retain greater than 97 percent pre-European vegetation (Government of Western Australia, 2013).

The local area (10 kilometre radius) is highly vegetated with approximately 99 percent vegetation remaining.

Given the above, the proposed clearing is not at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Carnarvon	8,382,890	8,360,803	99	12
Gascoyne	18,075,219	18,067,441	99	10
Shire*				
Shire of Carnarvon	4,637,457	4,613,566	99	7
Shire of Exmouth	649,315	635,565	97	44
Shire of Ashburton	10,086,657	10,059,961	99	16
Beard Vegetation Association*				
95	1,224,626	1,223,593	99	3
98	309,629	309,605	99	18
152	306,407	306,306	99	4
264	581,127	581,123	100	3
307	476,645	476,645	100	12
641	29,027	29,027	100	3
1162	71,617	71,598	99	0
1322	245,308	245,308	100	1
1601	129,097	129,097	100	0
2675	351,230	351,230	100	38

Methodology References:
*Government of Western Australia (2013)

(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 **Proposal is at variance to this Principle**

The Lyndon River (classified as a major river) and Yannarie River (classified as a minor perennial river) cross the application area. The point at which the Lyndon River crosses the application area is proposed to be dredged and widened in order to minimise the risk of flooding. Given this, the application area extends along the river for approximately one kilometre each side of the road centre line. Main Roads intends on widening the existing floodways by 500 millimetres on each side and raising the floodway's by 100 millimetres. The existing bridges will not be updated (GHD, 2013).

Numerous minor non-perennial watercourses cross the application area. As these watercourses are ephemeral and active only during high rainfall events, impacts are likely to be minimal.

The closest wetlands to the application area are located within approximately one kilometre.

As the application involves clearing vegetation growing along watercourses it is at variance to this clearing principle.

Methodology References:
GHD (2013)

GIS Datasets:
- Hydrography linear

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

Comments **Proposal is not likely to be at variance to this Principle**

The landscape surrounding the application area is highly vegetated retaining approximately 99 percent native vegetation. Groundwater salinity within the application area is mapped as marginal.

Given the linear nature of the proposed clearing, highly vegetated local area and as temporarily cleared areas will be revegetated; removing the vegetation under application is not likely to cause wind erosion, salinity or eutrophication.

Clearing is proposed for approximately one kilometre each side of the road centre line along the Lyndon River, classified as a major river. Main Roads intends on widening the existing floodway's by 500 millimetres on each side of the road and raising the floodway's by 100 millimetres. The existing bridges will not be updated (GHD, 2013).

As the application will involve clearing along a stretch of a major river it may lead to water erosion. As the applicant intends on managing the area as a floodway and revegetating temporarily cleared areas, this erosion is likely to be of a limited duration and is not likely to result in appreciable land degradation.

Given this, the application is not likely to be at variance to this principle.

Methodology References:
GHD (2013)

GIS Datasets:
- Hydrography linear

(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 Proposal is not likely to be at variance to this Principle

The application area is surrounded by the Ex Giralia conservation reserve for approximately four kilometres. As the clearing within this area will be to the minimal extent required and will be contained within the road reserve (Main Roads, 2014), direct impacts will be minimal (Parks and Wildlife, 2014).

Given that the application area adjoins a conservation reserve there is an increased risk of weeds spreading into the reserve. Weed management practices are likely to limit this risk.

Given the above, the application is not likely to be at variance to this principle.

Methodology References:
Main Roads (2014)
Parks and Wildlife (2014)

GIS Datasets:
- DEC 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 Proposal may be at variance to this Principle

The Lyndon River (classified as a major river) and Yannarie River (classified as a minor perennial river) cross the application area. The point at which the Lyndon River crosses the application area is proposed to be dredged and widened in order to minimise the risk of flooding. Given this, the application area extends along the river for approximately one kilometre each side of the road centre line. Main Roads intends on widening the existing floodway by 500 millimetres on each side and raising the floodway by 100 millimetres (GHD, 2013).

The application will involve clearing along two rivers which may lead to sedimentation of the watercourse and downstream wetlands. As the applicant intends on managing the area as a floodway and revegetating temporarily cleared areas, this sedimentation is likely to be of a limited duration (Parks and Wildlife, 2014).

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

Methodology References:
Parks and Wildlife (2014)

GIS Databases:
- 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 Proposal is not likely to be at variance to this Principle

Numerous watercourses cross the application area. Two of these are perennial, being, the Lyndon River and Yannarie River.

The point at which the Lyndon River crosses the application area is proposed to be dredged and widened in order to minimise the risk of flooding. Given this and the linear nature of clearing, the application is not likely to cause or exacerbate flooding and is not likely to be at variance to this clearing principle.

Methodology GIS Datasets:
-Hydrography linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments The Department of Water has advised that the applicant has been granted the following licences in relation to the project (DoW, 2014):

- A permit to interfere with the bed and banks of a watercourse (Lyndon River).
- A licence to take groundwater for dust suppression and construction purposes.
- A licence to construct and alter a well.

An Aboriginal Site of Significance is mapped within the application area. The applicant is advised to contact the department of Aboriginal Affairs in relation to their responsibilities under the Native title Act, 1994.

The Shire of Exmouth has advised that they have no objections to the proposed clearing.

The Shire of Carnarvon (2014) has advised that planning approval is not necessary.

The Department of Lands (2014) has given consent for Main Roads to apply for a clearing permit within the project area.

No submissions were received in relation to this application.

Methodology References:
DoW (2014)
Shire of Carnarvon (2014)
Department of Lands (2014)

GIS Datasets:
- Aboriginal Sites of Significance

4. References

- Department of Lands (2014) Letter of consent written to Main Roads WA in relation to Clearing Permit Application CPS 6020/1, Main Roads Western Australia. Received 2 September 2014 (DER ref: A803500).
- DoW (2014) Department of Water advice received for Clearing Permit Application CPS 6020/1, Main Roads Western Australia. Department of Parks and Wildlife, Western Australia (DER ref: A759844).
- GHD (2013) Information supplied in support of clearing permit application CPS 6020/1, North West Coastal Highway, Prepared for Main Roads WA (DER Ref: A730787).
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.
- Main Roads WA (2014) Correspondence from Kory Wright of Main Roads Western Australia. Sent via email 15/5/2014 (DER ref: A759806).
- Parks and Wildlife (2014) Species and Communities Branch advice for Clearing Permit Application CPS 6020/1, Main Roads Western Australia. Department of Parks and Wildlife, Western Australia (DER ref: A750878 and A744208).
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Carnarvon (2014) Advice received in relation to Clearing Permit Application CPS 6020/1, Main Roads Western Australia. Received 2 September 2014 (DER ref: A803503).