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# RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION

## AEON WALFORD EXPLORATION PTY LTD WALFORD EAST

JUNE 2022

AEO001



## **Document Control Sheet**

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## 1. Introduction

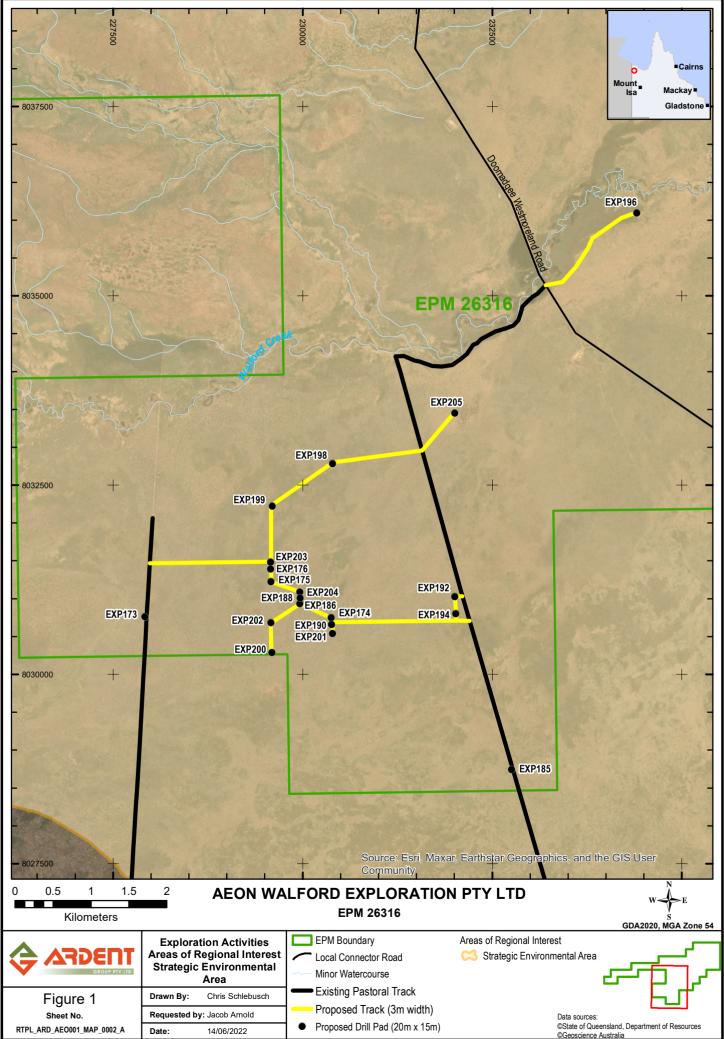
Aeon Walford Exploration Pty Ltd (Aeon) proposes to undertake exploration drilling for minerals on Exploration Permit for Minerals (EPM) 26316 as part of the Walford East Project located approximately 43km northwest of Doomadgee in northwest Queensland. The Walford East Project makes up part of the overall Aeon's Walford Creek Project.

The Walford East exploration project is situated within the Gulf Rivers Strategic Environmental Area (SEA) (**Figure 1**) and therefore Aeon requires approval under section 28 of the *Regional Planning Interests Act* 2014 (RPI Act). Aeon holds an existing Environmental Authority (EA) (EPSX04249516) and is therefore an eligible person under section 28 of the RPI Act.

Pursuant to section 34(2) of the RPI Act and section 13 of *Regional Planning Interests Regulation 2014* (RPI Regulation), the assessment application is not notifiable as the proposed exploration activities will be carried out in a SEA and not a priority living area. However, in accordance with section 34(4) of the RPI Act, the assessment application can become notifiable if the chief executive provides Aeon with a notice requiring the application to be notifiable.

Pursuant to section 12(2) of the RPI Regulation, the assessing agencies for a SEA are the Department of Environment and Science (DES) and the Department of Resources (DoR). The function of DES is to assess the expected impact of the activity on the ecological integrity of the environmental attributes for the area that relate to riparian processes, wildlife corridors or water quality. While the function of DoR is to assess the expected impact of the activity on the hydrodynamics of, and interactions with, the environmental attributes for the area that relate to hydrologic or geomorphic processes or beneficial flooding.

This report will discuss the environment attributes and expected impacts of this proposed exploration project on the environmental attributes.



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## 1.1 The Applicant and Project Overview

Aeon Walford Exploration Pty Ltd (ACN 634 353 610) is a wholly owned subsidiary of Aeon Metals Limited (ACN 121 964 725) (Aeon Metals). Aeon Metals is an Australian-based mineral exploration company listed on the Australian Stock Exchange (ASX code: AML). The Company has an extensive exploration tenement portfolio in the world-class Mt Isa mineral province in North West Queensland; as well as the Rawbelle district in South East Queensland. Aeon Metals' tenements are prospective for Copper, Cobalt, Gold, Lead, Zinc, Molybdenum and Silver. Aeon Metals' flagship asset, and highest priority tenement, is the 100% owned Walford Creek Project, which is an advanced world-class Copper-Cobalt project and one of the highest-grade significant cobalt deposits in Australia.

## 1.2 Property and Tenure Details

A summary of the property and tenure details situated within EPM 26316 are shown in **Table 1**. Title searches have been attached at **Appendix 1**.

Category	Land Parcel 1	Land Parcel 2	
Lot/Plan	Lot 1 on CP887914	Lot 11 on SP320130	
Property Name	Turn Off Lagoons Bowthorn		
Tenure	Lands Lease	Lands Lease	
	Turn Off Lagoons Pastoral Holding		
Landholder	Company Pty Ltd	Edward Sparke Charles Throsby	
	A.C.N. 085 377 304		

#### Table 1 Property and Tenure details within EPM 26316

EPM 26316 is situated within Lot 1 on CP887914 and Lot 11 on SP320130, the majority of disturbance associated with exploration activities will occur within Lot 1 on CP887914.

EPM 26316 was originally granted to Footprint Resources Pty Limited (Footprint) on 29 May 2017 for a period of five years expiring on 28 May 2022 (a renewal application has been lodged to DoR). Aeon entered into an agreement with Footprint, whereby 100% interest in EPM 26316 was to be transferred to Aeon. This transfer was approved on 5 January 2021 with EPM 26316 now 100% held by Aeon. The tenement was granted over an area of 60 sub-blocks (approximately 19,564ha).

Standard EA EPSX04249516 was granted as a part of the approval for EPM 26316, requiring Aeon to comply with the terms and conditions of the *"Eligibility criteria and standard conditions for exploration and mineral development projects – ESR/2016/1985"*, as produced by DES.



## 2. Proposed Activities

Aeon proposes to undertake the following resource activities under the Walford East Project, which will fall within EPM 26316, Lot 1 on CP887914, Lot 11 on SP320130 and the Gulf Rivers SEA:

- 1. Construction of an access track; and
- 2. Establishment of nineteen drill pads.

There will be 19 drillholes over EPM 26316.

A summary of the proposed activities, their locations and expected disturbance levels are summarised in **Table 2**. Definitions of each activity are described in **Table 3**, in addition, a schematic of the proposed drill pad is illustrated in **Figure 2**.

Activity	Number		Location		Total disturbance (ha)
Access tracks	As	Lo	t 1 on CP887	3.41ha	
	required				(3m wide tracks)
		Drillhole	Easting	Northing	
		Lot 1 on CP8	•		
		EXP174	230380	8030745	
		EXP175	229582	8031223	
		EXP176	229580	8031394	
		EXP185	232757	8028737	
		EXP186	229969	8031009	
		EXP188	229964	8030931	
	19	EXP190	230384	8030658	
		EXP192	232006	8031026	
		EXP194	232019	8030801	0.57ha
Drill pads		EXP196	234408	8036095	19 x (20m x 15m)
		EXP198	230396	8032780	15 x (2011 x 1511)
		EXP199	229600	8032222	
		EXP200	229597	8030288	
		EXP201	230394	8030538	
		EXP202	229583	8030683	
		EXP203	229578	8031481	
		EXP204	229964	8031087	
		EXP205	232008	8033448	
		Lot 11 on SP	[		
		EXP173	227920	8030763	
		Coordinates are GDA94 MGA Zone 54			
TOTAL DISTURBANCE FO	DR 19 TARGE	T SITES:			3.98ha

#### Table 2 Summary of proposed activities and their estimated disturbance



#### **Table 3 Definitions of resource activities**

<b>Resource Activity</b>	Definition
Access tracks	A cleared track approximately 3m wide to facilitate vehicular access of drilling
ACCESS TRACKS	equipment and personnel.
Drill pade	As shown in Figure 2, the drill pad is a 20m x 15m (0.03ha) area used to provide a
Drill pads	stable platform for the reverse circulation and diamond tail drilling procedure.

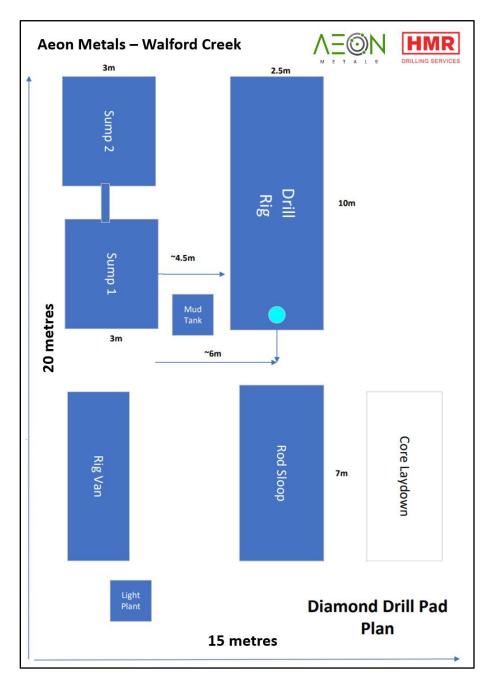


Figure 2 Schematic of the Proposed Drill Pad



## 2.1 Drilling Program

The exploration target is for new economy critical minerals, primarily cobalt and copper identical to that seen at the adjacent Walford Creek mineral resources. The existing resources are bound by breccia hosted and/or replacement copper ± cobalt with a Zn-Pb-Ag halo in dolomitic, carbonaceous and pyritic sediments of the Paleoproterozoic Mt Les Unit adjacent to the Fish River Fault. The proposed drilling intends to test for extensions of this mineralised system along the regionally East West trending Fish River Fault. Drill planning has taken place by applying the Walford Creek geological model using existing geophysical data, to target interpreted locations where the Fish River Fault or its splays have intersected the PY3 unit within the lower Mount Less Siltstones. Minimal drilling data exists for the area, so knowledge of the aquifers within the area is limited, however no significant aquifers are expected.

The target depths for drillholes are below in **Table 4** and range from 230m to 600m. Actual hole depths may exceed predicted depths. The on-duty geologist will inform if the target has been reached.

Site	Estimated Target Depth (m)	Site	Estimated Target Depth (m)
EXP173	300	EXP196	420
EXP174	230	EXP198	600
EXP175	300	EXP199	230
EXP176	450	EXP200	300
EXP185	300	EXP201	230
EXP186	230	EXP202	230
EXP188	230	EXP203	450
EXP190	230	EXP204	450
EXP192	230	EXP205	450
EXP194	230		

#### Table 4 Drillhole Depths

Drillholes will be completely grouted following the completion of drilling to prevent groundwater leakage between aquifers and the surface according to the Minimum Construction Requirements for Water Bores in Australia.

Clearing and minor earthworks may be required to prepare drill pads at the proposed sites. The drill pad will contain the drill rig and associated vehicles in addition to the drill sumps to hold drilling waters.

Drill pads have been selected on both geological and environmental grounds. Aeon has, where necessary, after determining the location of the geological anomaly also considered the corresponding environmental attribute(s) for that area. Geological anomalies are typically large enough that drill hole locations can be moved, without losing confidence in the quality of the drilling results.

Clearing is likely to be undertaken with the following equipment:

- Grader; and
- wheeled loader / backhoe.



The vegetation clearing will use the "blade up" method where possible, so that vegetation is cleared while minimising disturbance to roots and topsoil. The preparation of the drill sites may involve topsoil disturbance (to create a safe, level site) and in this case, cleared vegetation will be stockpiled separately from topsoil. The excavation of drill sumps is likely to use a wheeled loader/backhoe. Excavated subsoil soils will be stockpiled separately from topsoil.

Drilling equipment is likely to include the following equipment:

- drill rig (3 or 4 axle body truck);
- support truck (3 or 4 axle body truck);
- water truck (3 or 4 axle body truck); and
- light vehicles (4WD ute).

**Appendix 2** shows the extent of the proposed drill pads. Each drill pad will be no larger than 20m x 15m (0.03ha).

Site rehabilitation will be undertaken in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016)*. This includes, but not limited to:

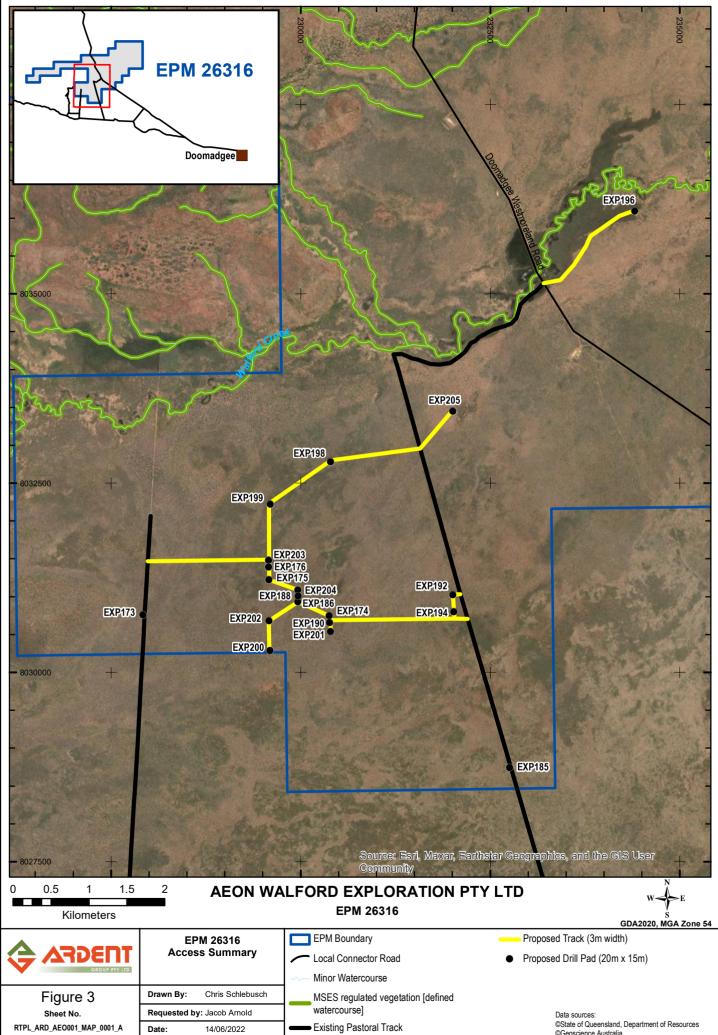
- Condition B26: The holder of the environmental authority must backfill all excavations, drill holes or sampling sites as soon as practical following the completion of exploration activities.
- Condition B27: Condition B26 does not apply to any excavations, drill holes or sampling sites that are to remain after the completion of exploration activities, by agreement with the landowner.
- Condition B28: The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform similar to that of surrounding undisturbed areas.
- Condition B29: The holder of the environmental authority must spread seeds or plant species that will promote vegetation of a similar species and density of cover to that of the surrounding undisturbed areas or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.

In regard to Condition B27, if the landowner requests that the drill hole be kept as a water bore, the appropriate approvals will be applied for in order to retain the drill hole as a water bore for the landholder.

#### 2.2 Access Tracks

Access tracks will be required to allow access for all drilling equipment and personnel to each of the proposed drilling sites. The proposed access tracks will begin from existing pastoral tracks where possible to minimise the level of overall disturbance and disturbance to environmental attributes. The width of the proposed access tracks will be kept to a maximum of 3m wide to provide enough room for vehicular access (Figure 3). Tracks will be constructed by driving the loader along the route, with the blade up where possible, to minimise disturbance to topsoil.

All access tracks used for exploration purposes will be rehabilitated as soon as practical following the competition of drilling or geological interest in the area in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects – Version 2 (2016).



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Geoscience Australia



#### 2.3 Water Supply

Water will be obtained by agreement with local landholders from water storages on the property. Water will be trucked to the drill site, as required.

#### 2.4 Timing

Exploration activities will occur in the dry season with activities concluding by mid-November to avoid conditions of high precipitation in the region. At this stage, depending on the approval timeframe, site activities will likely occur between July and mid-November. Following assessment of this application, Aeon will immediately seek access to the site to commence the exploration programme. The rehabilitation of all disturbance will commence as soon as practical after the conclusion of drilling if the area is of no longer of geological interest and the access track is not needed by the landholder.



## 3. Gulf Rivers Environmental Attributes

The relevant environmental attributes for the Gulf Rivers SEA are described in section 9 of the RPI Regulation and are reproduced below.

- a) The natural hydrologic processes of the area characterised by
  - i. Natural, unrestricted flows in and along watercourses and estuaries; and
  - ii. Overflow from watercourses onto the flood plains of the area, or the other way; and
  - iii. Natural flow paths of water across flood plains connecting waterholes, lakes and wetlands in the area; and
  - iv. Natural flow in and from groundwater and springs;
- b) The natural geomorphic processes of the area characterised by
  - i. Natural erosion; and
  - ii. The transport and deposit of sediment by water throughout the catchments and along the watercourse systems and estuaries;
- c) The functioning riparian processes of the area characterised by native riparian vegetation associated with watercourses, estuaries, lakes and floodplains and wetlands;
- d) The functioning wildlife corridors of the area characterised by
  - i. Natural habitat in the watercourse systems; and
  - ii. Permanent waterholes and springs;
- e) The natural water quality in the watercourse channels and aquifers and on flood plains in the area characterised by physical, chemical and biological attributes that support and maintain natural aquatic and terrestrial ecosystems.

Sub-sections 3.1 to 3.8 detail the existing environment, with potential impacts and mitigation strategies detailed in Section 4 of this Report.

#### 3.1 Riparian Process

The proposed exploration activities are unlikely to impact upon riparian processes of the Gulf Rivers SEA as no drill pads are located in the immediate vicinity of watercourses, estuaries, lakes or wetlands and proposed new access tracks do not cross these areas. There are no mapped areas of Matters of State Environmental Significant (MSES) regulated vegetation (defined watercourses) or MSES regulated vegetation (100m from wetland) being impacted by the proposed drill pads or newly constructed access tracks (Figure 4).

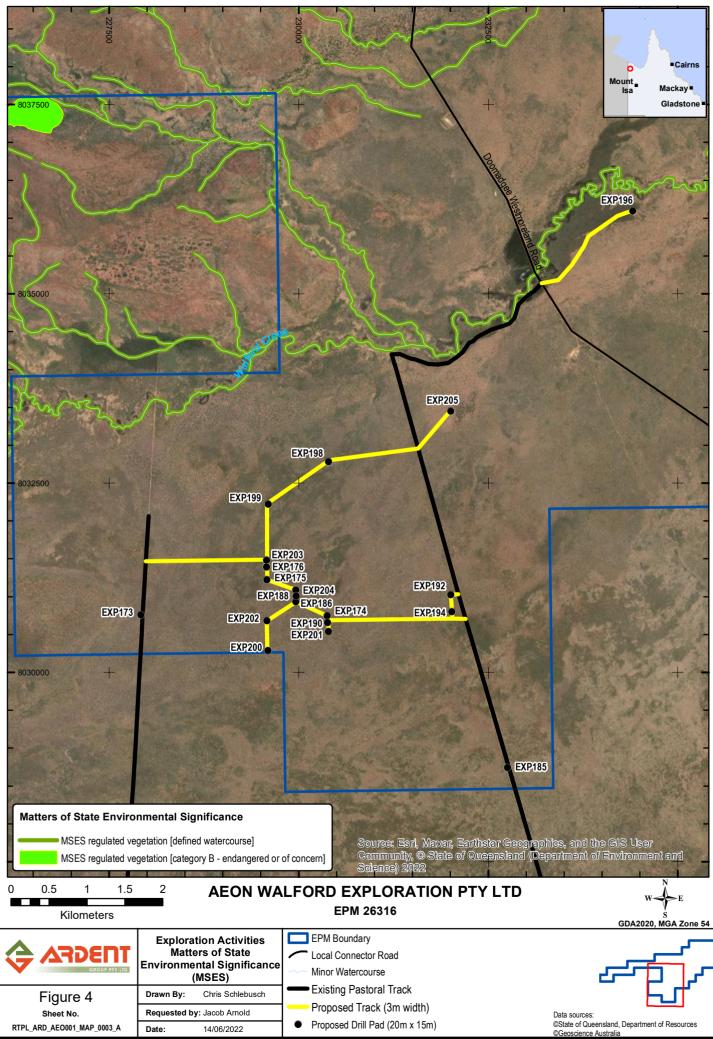
The proposed drill pads and new access tracks are located in areas mapped as 'Category A or B area that is least concern regional ecosystems'. A summary of all regional ecosystems (REs) which will be disturbed through access tracks and/or drill pads are described in **Table 5** with REs illustrated in **Figure 5**.

An Environmentally Sensitive Area (ESA) map (**Appendix 3**) indicates no mapped Category A, Category B or Category C ESAs will be impacted by exploration activities. In addition, the proposed exploration activities are not located in a high-risk area for protected plants (**Appendix 4**).



As detailed in Sections 2.1 and 2.2 of this Report, Aeon has endeavoured to avoid areas of regulated vegetation and limit creek crossings during the desktop assessment process. This has meant:

- Reviewing drill pad locations to ensure that, wherever practicable, holes are drilled outside of areas that may have the potential to be wetlands or watercourses.
- Refining proposed access tracks to avoid creek crossings or areas of significant vegetation.



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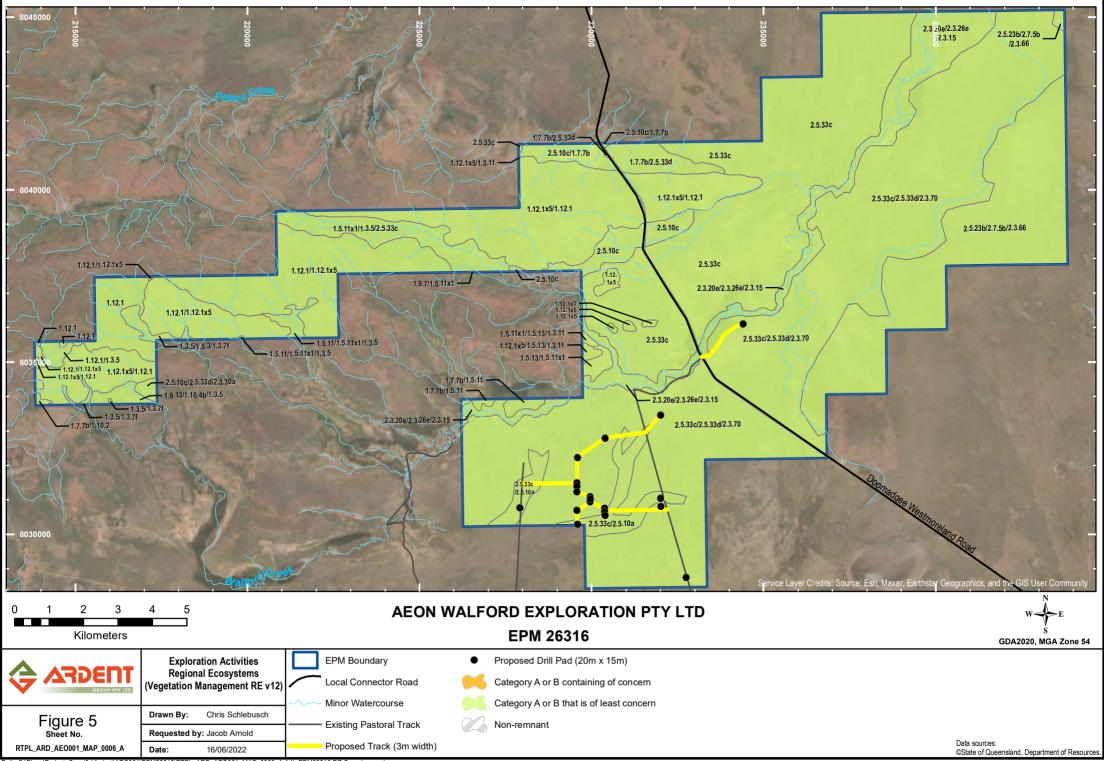


#### Table 5 Summary of Mapped Regional Ecosystems Disturbed by Exploration Activities

RE	Summary Description	Vegetation Management Act Class	Biodiversity Status	Structure Category
2.3.15	<i>Eucalyptus microtheca</i> woodland with <i>Sarga spp</i> . understorey. Sparse lower tree storey of <i>Melaleuca leucadendra</i> and <i>Excoecaria parvifolia</i> . Occurs on seasonally flooded depressions and lagoons on Tertiary and Quaternary alluvium; gleyed podzolics. <b>Special values</b> : Provides seasonal wetland habitat for a flora and fauna. Important feeding sites for water birds.	Least concern	No concern at present	Sparse
2.3.20	Mixed woodland to open woodland, with a combination of the species <i>Corymbia bella</i> , <i>Eucalyptus pruinosa</i> , <i>C. terminalis</i> , <i>Lysiphyllum cunninghamii</i> and <i>E. tectifica</i> . A lower tree or shrub layer may occur, including <i>Melaleuca spp</i> . and <i>Acacia spp</i> . The ground layer is tussock grasses, including <i>Chrysopogon fallax</i> , <i>Aristida spp.</i> , <i>Heteropogon</i> <i>contortus</i> and <i>Sehima nervosum</i> . Occurs on active levees and Quaternary alluvial plains in the west of the bioregion. Fine sandy brown soils and sandy yellow earths. <b>Special</b> <b>values</b> : Provincial refuge for some woodland flora and fauna.	Least concern	Of concern	Sparse
2.3.26	<i>Eucalyptus camaldulensis</i> woodland to low woodland, commonly with <i>Melaleuca spp</i> . Occasional canopy species include <i>Lophostemon grandiflorus</i> , <i>Pandanus spp</i> ., and <i>Terminalia spp</i> . A shrub layer may occur, including <i>Acacia spp</i> ., <i>Ficus opposita</i> and <i>Asteromyrtus symphyocarpa</i> . The ground layer is sparse, with tussock grasses, forbs and sedges. Occurs on fringes of sandy, seasonal channels. Coarse alluvial soils. <b>Special</b> <b>values</b> : Significant provincial refuges for fauna. Includes areas of permanent water with high habitat values for aquatic and other species.	Least concern	Of concern	Sparse
2.3.70	<i>Eucalyptus pruinosa</i> low woodland, occasionally with <i>Atalaya hemiglauca</i> . The ground layer is commonly dominated by <i>Eulalia aurea</i> . Occurs on old alluvial plains (recent Pleistocene surface). Brown clay loam soils.	Least concern	Of concern	Sparse
2.5.10a	<i>Eucalyptus chlorophylla</i> open woodland to woodland, occasionally with <i>E. microtheca</i> . A sparse lower tree or shrub layer may occur, including <i>Melaleuca spp.</i> , <i>Grevillea striata</i> , <i>Lysiphyllum cunninghamii</i> , <i>Dolichandrone heterophylla</i> and <i>Carissa lanceolata</i> . The ground layer is tussock grasses, including <i>Eriachne spp.</i> and <i>Themeda arguens</i> . Occurs on active Quaternary alluvial plains, commonly associated with major watercourses. Silty clays and texture contrast soils.	Least concern	No concern at present	Very sparse



RE	Summary Description	Vegetation Management Act Class	Biodiversity Status	Structure Category
2.5.33	<i>Melaleuca spp.</i> low open woodland to low woodland, occasionally with Eucalyptus pruinosa, Asteromyrtus symphyocarpa and Terminalia canescens. Emergent <i>Corymbia spp., Eucalyptus spp.</i> and <i>M. stenostachya</i> may occur. A variable shrub layer may occur. The ground layer includes <i>Chrysopogon fallax</i> , <i>Heterachne gulliveri</i> and <i>Triodia pungens</i> . Occurs on sand sheets, outwash plains and sandy old alluvial surfaces in the west of the bioregion. Yellow to brown sandy loams.	Least concern	No concern at present	Sparse
2.5.33c	<i>Melaleuca citrolens</i> and/or <i>Eucalyptus pruinosa</i> and/or <i>M. viridiflora</i> low open woodland, occasionally with <i>E. tectifica</i> , <i>M. stenostachya</i> and <i>Cochlospermum gregorii</i> . A shrub layer commonly occurs, including canopy species and <i>Carissa lanceolata</i> . The ground layer is tussock grasses and <i>Triodia pungens</i> . Occurs on level, old alluvial plains (early Pleistocene surface) between Tertiary lateritic surfaces and active alluvial systems. Yellow-brown silty loam soils.	Least concern	No concern at present	Sparse
2.5.33d	<i>Melaleuca viridiflora</i> and/or <i>M. citrolens</i> low open woodland to low woodland. A sparse shrub layer may occur, including <i>Acacia spp.</i> and <i>Carissa lanceolata</i> . The ground layer includes <i>Schizachyrium fragile, Triodia pungens</i> and <i>Aristida spp.</i> Occurs on Tertiary outwash plains and sand sheets around the margins of dissected lateritic surfaces and the Northwest Highlands bioregion. Yellow to brown loams and texture contrast soils.	Least concern	No concern at present	Sparse



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## 3.2 Wildlife Corridors

Vegetation communities along watercourses and drainage features not only function as habitat for fauna but also as a movement corridor. According to the Vegetation Management Watercourse and Drainage Feature Mapping for the area, no mapped watercourses will be impacted by drill pads or newly constructed access tracks.

There are no known waterholes or groundwater dependent ecosystems (GDE) mapped nearby to the proposed disturbance areas.

## 3.3 Water Quality

The exploration activities will occur in the upper catchment of the Settlement drainage basin within the Cliffdale Creek drainage sub-basin. The location of the proposed exploration is very remote with little to no data on the water quality of watercourses within the upper catchment of the Settlement drainage basin. Drainage from the exploration activities will flow into Walford Creek before it converges with Cliffdale Creek which ultimately flows into Elizabeth Creek and, subsequently, into the Gulf of Carpentaria.

There are no open or closed Department of Regional Development, Manufacturing and Water (DRDMW) gauging stations within the Settlement drainage basin.

In terms of groundwater, the Walford East Project is situated on the Great Artesian Basin and Other Regional Aquifers Water Plan area. There are no known artesian springs located near the exploration activities. There are no registered groundwater bores within 10km of the proposed drill sites. The nearest registered groundwater bore is bore RN171075 located at least 11km from the drill sites, however, no groundwater quality data has been collected at this bore.

## 3.4 Hydrological Processes

The nearest Water Act defined watercourses are the Nicholson River and Cliffdale Creek located approximately 10km south and 20km north of the exploration activities respectively. There will not be any dams, lakes or springs located near the proposed exploration activities.

## 3.5 Geomorphic Processes

Drillholes will encounter breccia hosted and/or replacement copper ± cobalt with a Zn-Pb-Ag halo in dolomitic, carbonaceous and pyritic sediments of the Paleoproterozoic Mt Les Unit adjacent to the Fish River Fault. Minimal drilling data exists for the area, so knowledge of the aquifers within the area is limited, however no significant aquifers are expected.

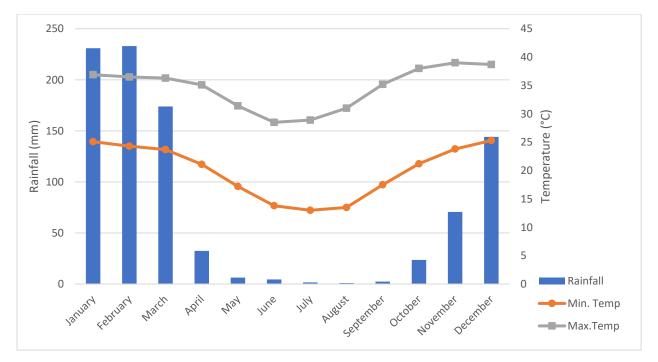


## 3.6 Beneficial Flooding

The majority of the proposed areas of disturbance are not situated in the mapped "flood hazard area - Level 1 - Queensland floodplain assessment overlay" for floodplain areas which are potentially at threat of inundation with only one drill site is mapped within this area. It is important to note that exploration activities will be conducted in the dry season.

#### 3.7 Climate

The region is characterised by having a distinct wet and dry season, the mean annual rainfall for the region is 924.4mm with approximately 85% of the annual rainfall falling between December and March. Mean daily minimum temperatures range from between 13°C and 25.3°C, while mean maximum temperatures range from 28.5°C to 39°C (Figure 6).



Rainfall data is taken from Westmoreland Station weather station located approximately 55km from the Walford East Project using monthly rainfall data beginning in 1965. The temperature data is taken from the BoM Century Mine QLD weather station located approximately 110km from the Walford East Project. Monthly data used for mean minimum and maximum temperatures is from 2003 to present.

Figure 6 Monthly mean rainfall, minimum and maximum temperatures for the region (BOM, 2022)

## 3.8 Land Use

The land use of the surrounding area is largely classified as grazing native vegetation. Exploration activities will be located on land mapped as 'grazing native vegetation' land use.



## 4. Potential Impacts on Environmental Attributes

To address Section 9 of the RPI Regulation (as shown in Section 3 of this Report), sub-sections 4.1 to 4.5 below detail the required outcomes in relation to:

- Riparian process;
- Wildlife corridors;
- Water quality;
- Hydrologic processes and beneficial flooding; and
- Geomorphic processes.

#### 4.1 Riparian Process

The proposed exploration activities are unlikely to impact on riparian vegetation as there are no disturbance to MSES regulated vegetation (defined watercourse) or MSES regulated vegetation (100m from wetland) from the drill pads or newly constructed access tracks.

Desktop and preliminary investigations have considered riparian ecosystems and therefore, there is no current intention to have setback areas for this particular project. The proposed activities will not cause widespread or irreversible impacts to the riparian processes in the region as:

- exploration activities will be small-scale, of a temporary nature and conducted during the dry season;
- widespread areas of riparian vegetation will not be cleared;
- disturbance rehabilitation will occur immediately after works have been completed; and
- all activities and disturbance rehabilitation will be in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects Version 2 (2016).

#### 4.2 Wildlife Corridors

The proposed routes for the access tracks will minimise isolation, fragmentation and edge effects as access tracks will only be 3m wide and have utilised existing pastoral tracks where possible. Wildlife corridors in the exploration area will largely involve MSES regulated vegetation (defined watercourse). There will be no new disturbance to these corridors from the drill pads or access tracks. As such, it is considered that widespread irreversible disturbance to wildlife corridors will not occur as a result of the proposed exploration activities.



#### 4.2.1 Consideration of Rare and Threatened Fauna

**Appendix 5** is a copy of the *Environment Protection and Biodiversity Conservation Act 1999* (C'wlth) (EPBC Act) Protected Matters Report for the site activities. This report lists threatened species or threatened species habitat that may, is likely to, or is known to occur, in the proposed disturbance area.

The EPBC Act Protected Matters report lists two threatened fauna species or their habitat as likely to occur in the exploration area. The Red Goshawk (*Erythrotriorchis radiatus*) is listed as Vulnerable under the EPBC Act and Endangered under the *Nature Conservation Act 1992* (NC Act). The Red Goshawk inhabits tall open forests and woodlands and typically nests in trees that are taller than 20m. Consequently, mature trees greater than 20m, will not be cleared or damaged during exploration activities. The Grey Falcon (*Falco hypoleucos*) is listed as vulnerable under both the EPBC Act and NC Act. Grey Falcon breeding occurs from June to November with nests usually chosen are in the tallest trees along watercourses, particularly River Red Gum (*Eucalyptus camaldulensis*) and Coolibah (*E. coolabah*). Exploration activities is unlikely to impact upon riparian vegetation and will avoid mature trees.

A Queensland Government Wildlife Online Extract was completed for the area. The species list search displayed no records for the area for the above species (**Appendix 6**).

#### 4.2.2 Management Strategies

A number of impact management strategies will be used during exploration activities. Management measures include:

- Timing activities to take place in the dry season;
- Toolbox talks with exploration staff to raise the importance of protecting the natural environment;
- Minimise width of access tracks;
- Minimise vegetation clearing;
- Avoid areas of environmental significance;
- Retain mature trees;
- Retain rootstock where practical; and
- Rehabilitate crossing points at the completion of exploration activities at that site.

The connectivity between native terrestrial vegetation along and across watercourse systems will not be altered or disturbed and will continue to be sufficient for the migration, shelter and habitat of fauna.

Watercourses near exploration activities are not permanent and will have little, if any flow at the time of the proposed activity (in the dry season), it is unlikely that the watercourses will be functioning as passage for aquatic/marine fauna. Even if sufficient flow is present when exploration activities are occurring, it is not expected that vehicles crossing drainage lines will inhibit flow in the watercourse.

The proposed exploration activities will not compromise the spatial extent and species diversity, structure and density of native terrestrial and aquatic vegetation. The habitat will continue to provide shelter and connectivity for fauna, including passage into and along watercourses. As the access tracks are only 3m wide, and are not formed and graded, minimal edge effects will be created. Consequently, it is unlikely that habitat, feeding, roosting or nesting of fauna in areas adjacent to the track will be compromised.



Drilling at each of the drill sites is expected to be completed within two to five days. Rehabilitation of disturbance will commence immediately after the completion of exploration activities in the area, in accordance with the rehabilitation conditions set out in the *"Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2"* document.

### 4.3 Water Quality

The proposed exploration activities will occur in the dry season with minimal if any precipitation falling resulting in reduced watercourse flows in the region. As illustrated in **Figure 6**, the mean average rainfall during proposed exploration activities occurring between July and November is minimal. During exploration activities, the physical, chemical and biological water quality immediately downstream of the activities will remain consistent with water quality immediately upstream of the activity. Therefore, there will be negligible impacts on the physical, chemical and biological attributes that support and maintain natural aquatic and terrestrial ecosystems in the area.

In regard to drilling, each drill hole is expected to be completed in 2 to 5 days. The drilling and casing methodology will be undertaken in a manner to case off any aquifers encountered in the overburden. There may be some additives added to the water recirculated in the drill hole to improve drilling conditions, including materials such as bentonite clay. The drill fluid is recirculated within the casing (once placed) in the upper part of the drill hole, and therefore there will be little, if any exchange with the near surface aquifers. Deeper in the hole, pore pressure in the basement rock are such that drilling fluids will not migrate out of the drill hole. Therefore, there should be no impact on groundwater quality from the drilling.

Upon completion of drilling, the drill hole will be backfilled to surface with grout (cement) so as to fully seal the drill hole. This will ensure that any aquifers encountered are fully sealed and there can be no connection between aquifers, nor surface seepage. Therefore, there should be no impact on aquifer pressure from the drilling. Suitably qualified and experienced drillers (for artesian conditions) will supervise the drilling.

All drill sites and associated sumps will be rehabilitated in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016).* Due to the high evaporation rates in the region, drill water remaining in the sumps will likely evaporate within two to three weeks. Temporary fencing of the sumps will occur to prevent cattle or wildlife access. Once dry, rehabilitation of the site will occur with the bentonite clay material remaining at the bottom of the sumps to be covered with the stockpiled subsoil and topsoil. Timing of all activities will aid in minimising surface water impacts.

## 4.4 Hydrologic processes and beneficial flooding

The proposed access tracks will be constructed and used in the dry season and will have minimal influence on the gradient of the land to ensure the overflow or flow of surface water in or out of a watercourse will not be inhibited. Watercourse flows are expected to be minimal if at all throughout the exploration area during the time of exploration activities. Crossings of minor drainage features should not impact any waterflow. The exploration activities will not alter the natural patterns and levels of runoff, stream flow



and connectivity with other elements of the river and flood plain system to the extent of causing significant adverse outcomes.

The majority of the proposed activities will not be situated near any major watercourses or floodplains that have the potential of being inundated. In addition, the proposed activities will not compromise beneficial flooding where the activity will alter natural flow paths and the natural extent of flooding across the floodplain.

#### 4.5 Geomorphic processes

The proposed exploration activities will not have widespread or irreversible impact on the natural erosion and transport and deposit of sediment by water throughout the catchment. As activities will occur in the dry season when negligible precipitation is expected, and water flow is heavily reduced, the transport and deposit of sediment by water throughout the catchment will be minimal reducing the possibility of any widespread or irreversible impacts. The exploration activities will not compromise the preservation of the natural erosion, transport and deposition of sediments by water throughout the catchment. Whereby, activities will not alter the delivery of sediment to the river system from adjacent lands and the erosion of the bed, banks and floodplains to the extent of causing significant adverse outcomes.

Erosion and sediment control may be required for the access tracks, drill pads and other disturbance areas. Measures will be undertaken in accordance with the *Eligibility criteria and standard conditions for exploration and mineral development projects – Version 2 (2016)* and in line with the guiding principles contained within the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control (BPESC) manual.

For the access tracks, drill pads and other disturbance areas, it will be the intention to:

- Select appropriate areas (for example: avoiding areas of environmental significance, retention of mature or habitat trees, minimise vegetation clearing, retain rootstock where practicable); and
- Ensure the effect of exploration activities are minimised on surrounding vegetation or watercourses.

To meet these key principles, following appropriate site selection, mitigation measures such as the following will be implemented as necessary:

- Minimise all vegetation clearing;
- Store topsoil and subsoil for use in rehabilitation;
- Ensure all fuel is appropriately bunded;
- Store all exploration materials (drilling muds etc) on pallets;
- Construct all drill pads on flat surfaces;
- Stabilise access tracks wherever necessary and, if necessary, employ geotextile;
- Repair any damage caused by traffic as soon as practicable;
- Limit traffic along the access tracks;
- Direct all drilling muds to appropriately sized sumps;
- Conduct regular inspections for fuel discharge, and sedimentation and erosion, as a result of exploration activities; and
- Commence rehabilitation as soon as practicable after final use.



## 5. Regional Planning Interests Regulation 2014 Assessment Criteria

Schedule 2, Part 5 of the RPI Regulation provide criteria for the assessment or decision of the RPI application. The required outcome and prescribed solutions are detailed below in **Table 6**. This table provides a summary of the details described in this project against the assessment criteria.

#### Table 6 Criteria for assessment or decision in a SEA

Schedule 2 Part 5 of the RPI Regulation	Response
(14) Required Outcome	
The activity will not result in a widespread or irreversible impact on an environmental attribute of a strategic environmental area. (15) Prescribed Solution	The proposed activities will not result in widespread or irreversible damage to the environmental attributes listed in section 9 of the RPI Regulation for the Gulf Rivers SEA as described in Sections 4.1-4.5 of this report (and summarised in the response components of this table, below).
(1) The application demonstrates either –	Note: this application addresses the requirement
<ul> <li>(a) the activity will not, and is not likely to, have a direct or indirect impact on an environmental attribute of the strategic environmental area; or</li> </ul>	of section 15(1)(b).
<ul> <li>(b) all of the following –</li> <li>(i) if the activity is being carried out in a designated precinct in the strategic environmental area – the activity is not an unacceptable use for the precinct;</li> </ul>	<ul> <li>The proposed activities will not be carried out within a designated precinct. Furthermore, the proposed activities do not include any of the unacceptable uses listed in Schedule 2 Part 5 section 15(2).</li> <li>Desktop investigations have been conducted to refine the access tracks to the drill sites in order to minimise the operational footprint on</li> </ul>
(ii) the construction and operation footprint of the activity on the environmental attribute is minimised to the greatest extent possible;	<ul> <li>environmental attributes.</li> <li>Searches of Queensland (MSES, RE, ESA, Vegetation Management Watercourse and Drainage Features and Protected Plants Flora Survey Triggers) and Commonwealth (EPBC Act) databases have been undertaken.</li> <li>Site access construction will be limited to a 3m wide track. Existing tracks have been utilised where possible.</li> <li>Drill pads are limited to 20m x 15m.</li> <li>During on-site access road construction and drill pad location, all mature trees and areas of ecological significance will be avoided.</li> </ul>
(iii) the activity does not compromise the preservation of the environmental attribute within the strategic environmental area;	<ul> <li>Desktop investigations have been conducted to refine the access tracks to the drill sites in order to minimise the operational footprint on environmental attributes.</li> <li>The exploration activities will have minimal impacts on the natural hydrologic processes of</li> </ul>



will be conducted precipitati	rses, floodplains and groundwater minimal due to activities being
geomorph limited im region, in sediment as waterfil Based up considere disturband area. Due nature of to create the function Due to th of the exi works will season, it be widesp functionin disturband vegetation regulated Water qua maintains ecosystem watercouu minor dra with no proposed All drill s rehabilitat criteria exploration – Version J rates in th sumps will weeks. Te occur to p	d in the dry season when tion and waterflow is very low. Wities will have minimal impacts on hic processes of the area through mpact to the natural erosion of the n addition to the movement of by water throughout the catchment low will be minimal in the dry season. pon a desktop assessment, it is ed that there is unlikely to be the to the small-scale and temporary the exploration works, it is unlikely widespread or irreversible impact to ioning of the wildlife corridors. The small-scale and temporary nature exploration works and the fact that If be conducted only during the dry is considered unlikely that there will pread or irreversible impact to the ng riparian processes. There is no the proposed to MSES regulated in (defined watercourse) or MSES I vegetation (100m from wetland). tality in the region that supports and is natural aquatic and terrestrial ins will not be impacted as no major irses will be disturbed. With only ainage features likely to be crossed flow likely to be present at this itime of year. site and associated sumps will be the din accordance with the <i>Eligibility and standard conditions for on and mineral development projects</i> 2 (2016). Due to the high evaporation the region, drill water remaining in the II likely evaporate within two to three emporary fencing of the sumps will prevent cattle or wildlife access. Once bilitation of the site will occur with onite clay material remaining at the



Schedule 2 Part 5 of the RPI Regulation	Response
	stockpiled subsoil and topsoil. Timing of all activities will aid in minimising surface water impacts.
(iv) if the activity is to be carried out in a strategic environmental area identified in a regional plan – the activity will contribute to the regional outcomes, and be consistent with the regional policies, stated in the regional plan.	The Gulf Regional Development Plan (November 2000) does not identify the Gulf River SEA.



## 6. Conclusion

Aeon intends to conduct a small-scale exploration drilling programme within its granted EPM 26316. As part of this programme, nineteen drill pads will be constructed. To access these sites, a 3m wide access track will be constructed.

Disturbance areas are detailed in **Table 2** of this Report and are summarised below:

- Drill pads 0.57ha (19 x 20m x 15m); and
- Access track 3.41ha (3m wide tracks)

Therefore, the total disturbance for nineteen target sites is 3.98ha. The vast majority of this is created by the access track to the drill sites which has been minimised to a 3m wide corridor to limit broader disturbance. The largest area of disturbance in any one location is 0.03ha (20m x 15m), which is the size of the drill pad.

In line with Section 15 (1)(b) of the RPI Regulation, it is not considered that the proposed activities will cause widespread or irreversible impacts to the SEA in the region, as:

- The activity is not being carried out in a designated precinct and is not considered an unacceptable use;
- exploration activities will be small-scale, of a temporary nature and conducted during the dry season;
- drilling at each site is expected to be completed within two to five days;
- searches of appropriate State and Commonwealth databases have been undertaken and a desktop assessment has been included in the final selection of drill sites and preferred access routes;
- widespread areas of riparian vegetation will not be cleared;
- disturbance rehabilitation will occur as soon as possible after works have been completed; and
- all activities and disturbance rehabilitation will be in accordance with the *Eligibility criteria and* standard conditions for exploration and mineral development projects Version 2 (2016).



#### 7. References

Bureau of Meteorology (BOM) 2022, Daily rainfall Westmoreland Station, accessed 9 June 2022,<www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=136&p\_display\_type=dailyData File&p\_startYear=&p\_c=&p\_stn\_num=029069>.

BOM 2022, Daily mean maximum temperature Century Mine, accessed 9 June 2022, <www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=122&p\_display\_type=dailyDataFile&p \_startYear=&p\_c=&p\_stn\_num=029167>.

BOM 2022, Daily mean minimum temperature Century Mine, accessed 9 June 2022, <www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p\_nccObsCode=123&p\_display\_type=dailyDataFile&p \_startYear=&p\_c=&p\_stn\_num=029167>.



## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

Appendix 1 Title Searches



#### Queensland Titles Registry Pty Ltd ABN 23 648 568 101

Title Reference:	17664127	Search Date:
Date State Tenure Created:	21/10/1995	Request No:

Creating Dealing:

#### DESCRIPTION OF LAND

Tenure Reference: PH 8/5440

Lease T	уре:	RC	DLLING	TERM	LEASE
LOT 1	CROV	VN PLAN	N 88792	14	

Area: 208000.000000 Ha. (ABOUT)

No Land Description

No Forestry Entitlement Area

Purpose for which granted: NO PURPOSE DEFINED

#### REGISTERED LESSEE

Dealing No: 703482089 28/07/1999 TURN OFF LAGOONS PASTORAL HOLDING COMPANY PTY LTD

A.C.N. 085 377 304

#### TERM OF LEASE

Term and day of beginning of lease Term: 30 years commencing on 01/07/1984 Expiring on 30/06/2014 Extended to 30/06/2034

#### CONDITIONS

NIL

#### ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by Lease No. 17664127

#### ADMINISTRATIVE ADVICES

Dealing	Туре	Lodgement Date	Status
716869987	ADMIN NOTING	06/11/2015 11:42	CURRENT
	SEE DEALING FOR RELEVANT LEGISLATION		
717833857	CON COM AGMT	10/02/2017 15:25	CURRENT
	MINERAL AND ENERGY RESOURCES (COMMON PROVIS	IONS) ACT 2014	
717994336	NT DETERM	02/05/2017 15:13	CURRENT
	NATIVE TITLE ACT 1993 (CTH)		
718205111	NT DETERM	10/08/2017 14:21	CURRENT
	NATIVE TITLE ACT 1993 (CTH)		
718674880	ADMIN NOTING	06/04/2018 10:03	CURRENT
	SEE DEALING FOR RELEVANT LEGISLATION		
719767646	EXEMPT CONS	02/12/2019 08:28	CURRENT
	SEC 322AA LAND ACT 1994		
721172647	NT DETERM	14/10/2021 14:55	CURRENT



#### **Current State Tenure Search**

Queensland Titles Registry Pty Ltd ABN 23 648 568 101		Title Refer	rence:	17664127	
ADMINIST	RATIVE ADVICES (Continued)				
Dealing	<b>Type</b> NATIVE TITLE ACT 1993 (CTH)	Lodgement Date	Status		
UNREGISTERED DEALINGS					

NIL

\*\* End of Current State Tenure Search \*\*

Information provided under section 34 Land Title Act (1994) or section 281 Land Act (1994)



#### Queensland Titles Registry Pty Ltd ABN 23 648 568 101

Title Refere	nce:	17657048	Search Date:
Date State 1	enure Created:	21/10/1995	Request No:

Creating Dealing:

#### DESCRIPTION OF LAND

Tenure Reference: GHPL 8/50 Lease Type: PERPETUAL LOT 11 SURVEY PLAN 320130 Local Government: BURKE Area: 234000.000000 Ha. (ABOUT) No Land Description

No Forestry Entitlement Area

Purpose for which granted: GRAZING OR AGRICULTURAL

#### REGISTERED LESSEE

Dealing No: 708770341 27/06/2005 EDWARD SPARKE CHARLES THROSBY

#### TERM OF LEASE

Day of beginning of lease

Lease in perpetuity commencing on 01/07/1984

#### CONDITIONS

- M76 The Lessee shall, within five (5) years from the date of the commencement of the lease and to the satisfaction of the Minister provide two (2) earth dams each with a capacity of 7500 cubic metres, such dams to be provided in the eastern and central parts of the additional area.
- M76 The Lessee shall, within two (2) years from the date of the commencement of the lease and to the satisfaction of the Minister erect approximately 20 kilometres of new boundary fence on the additional area.
- M76 The Lessee shall, within five (5) years from the date of the commencement of the Lease and to the satisfaction of the Minister, erect approximately 50 kilometres of new internal fencing on the area with 40 kilometres of such fencing to be erected on the additional area.
- M76 The Lessee shall, during the whole term of the lease, maintain all improvements on the holding existing at the commencement thereof, together with the improvements effected in compliance with conditions 1, 2 and 3 hereof, in a good and substantial state of repair.

#### ENCUMBRANCES AND INTERESTS

- 1. Rights and interests reserved to the Crown by Lease No. 17657048
- 2. MORTGAGE No 720577949 09/02/2021 at 15:14 NATIONAL AUSTRALIA BANK LIMITED A.C.N. 004 044 937

COPYRIGHT QUEENSLAND TITLES REGISTRY PTY LTD [2022] Requested by: D-ENQ TITLES QUEENSLAND



Queensland Titles Registry Pty Ltd ABN 23 648 568 101 **Current State Tenure Search** 

Title Reference:

17657048

ADMINISTRATIVE ADVICES					
Dealing	Туре	Lodgement Date	Status		
717924170	CON COM AGMT	27/03/2017 14:40	CURRENT		
	MINERAL AND ENERGY RESOURCES (COMMON PR	ROVISIONS) ACT 2014			
718173089	CON COM AGMT	25/07/2017 14:01	CURRENT		
	MINERAL AND ENERGY RESOURCES (COMMON PR	ROVISIONS) ACT 2014			
718674901	ADMIN NOTING	06/04/2018 10:05	CURRENT		
	SEE DEALING FOR RELEVANT LEGISLATION				
719422391	CON COM AGMT	23/05/2019 14:47	CURRENT		
	MINERAL AND ENERGY RESOURCES (COMMON PR	ROVISIONS) ACT 2014			
719690627	CON COM AGMT	22/10/2019 15:44	CURRENT		
	MINERAL AND ENERGY RESOURCES (COMMON PR	ROVISIONS) ACT 2014			
719690642	CON COM AGMT	22/10/2019 15:45	CURRENT		
	MINERAL AND ENERGY RESOURCES (COMMON PR	ROVISIONS) ACT 2014			
719767646	EXEMPT CONS	02/12/2019 08:28	CURRENT		
	SEC 322AA LAND ACT 1994				

#### UNREGISTERED DEALINGS

NIL

Corrections have occurred - Refer to Historical Search

Caution - Charges do not necessarily appear in order of priority

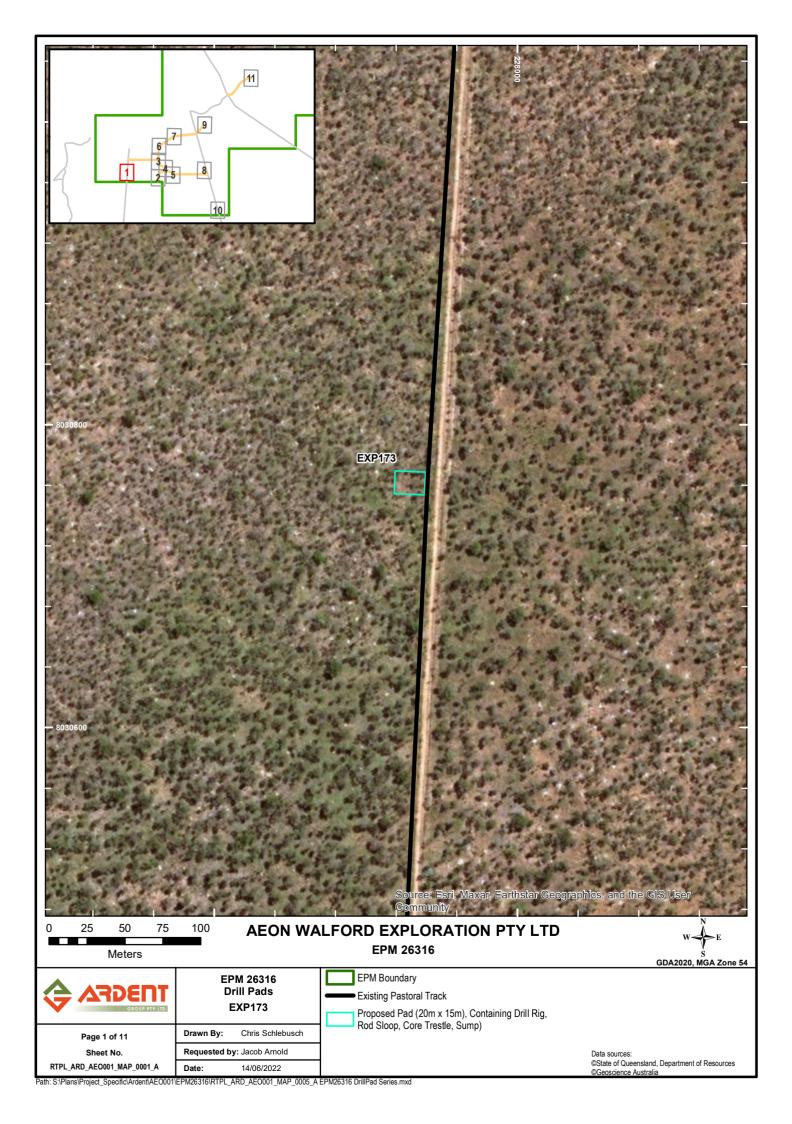
\*\* End of Current State Tenure Search \*\*

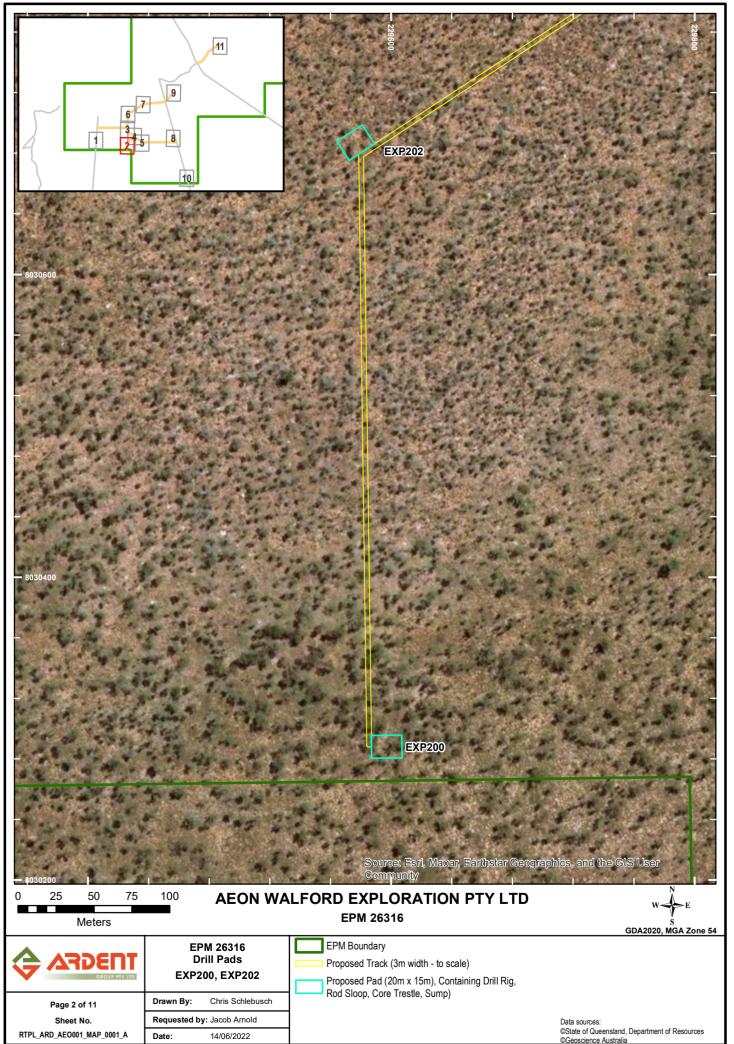
Information provided under section 34 Land Title Act (1994) or section 281 Land Act (1994)

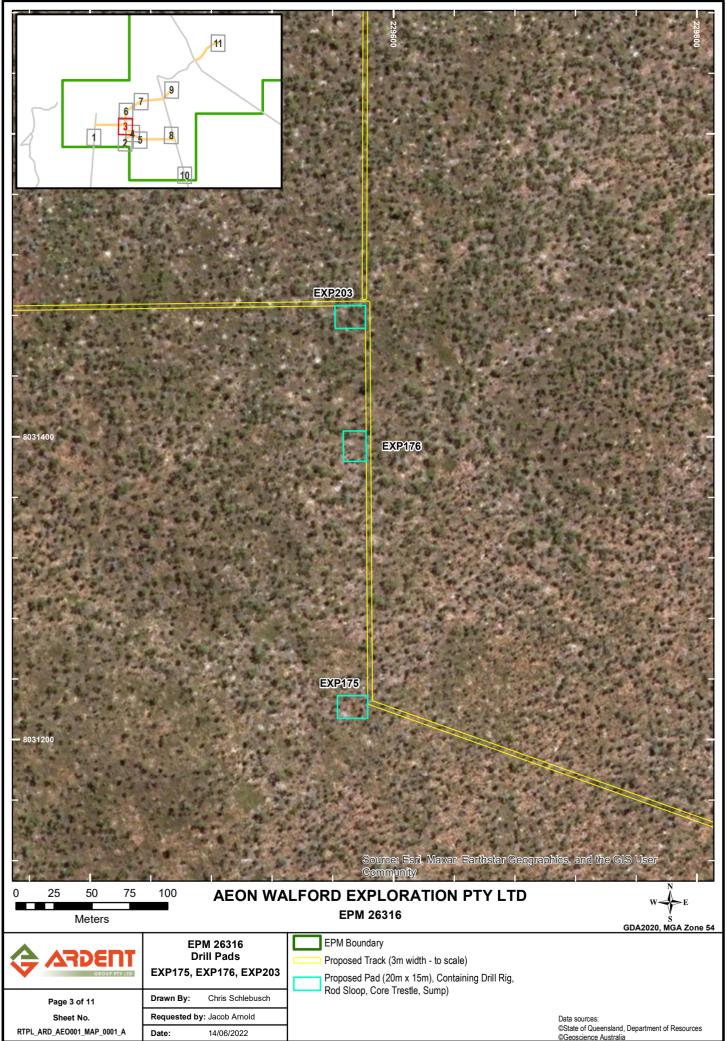


## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

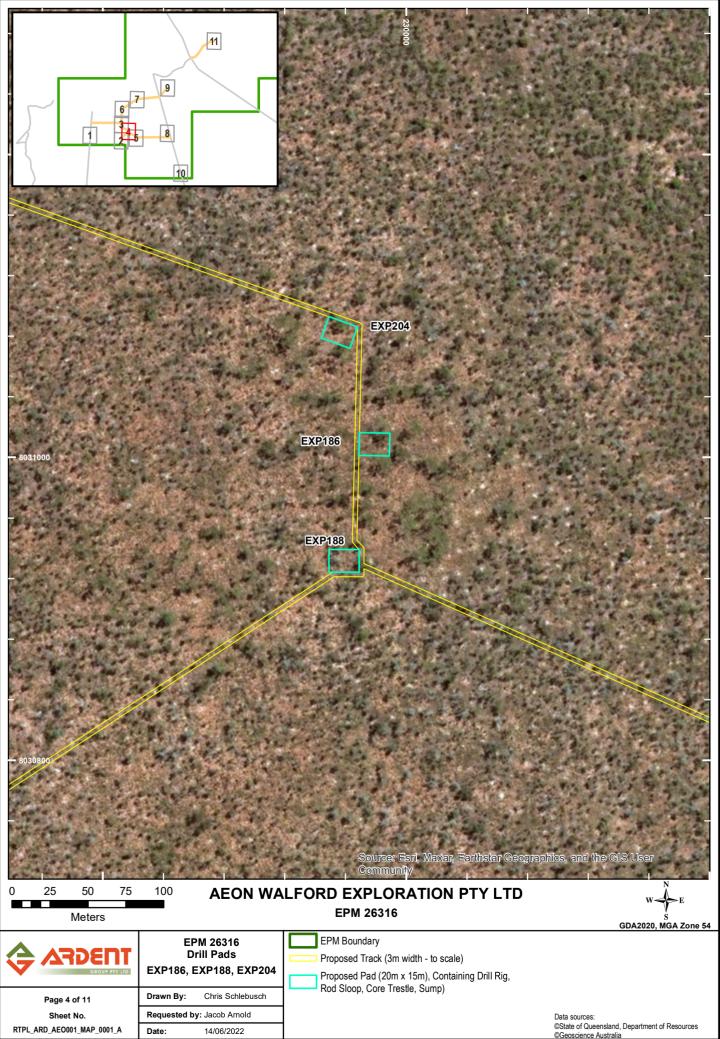
Appendix 2 Drill Pads



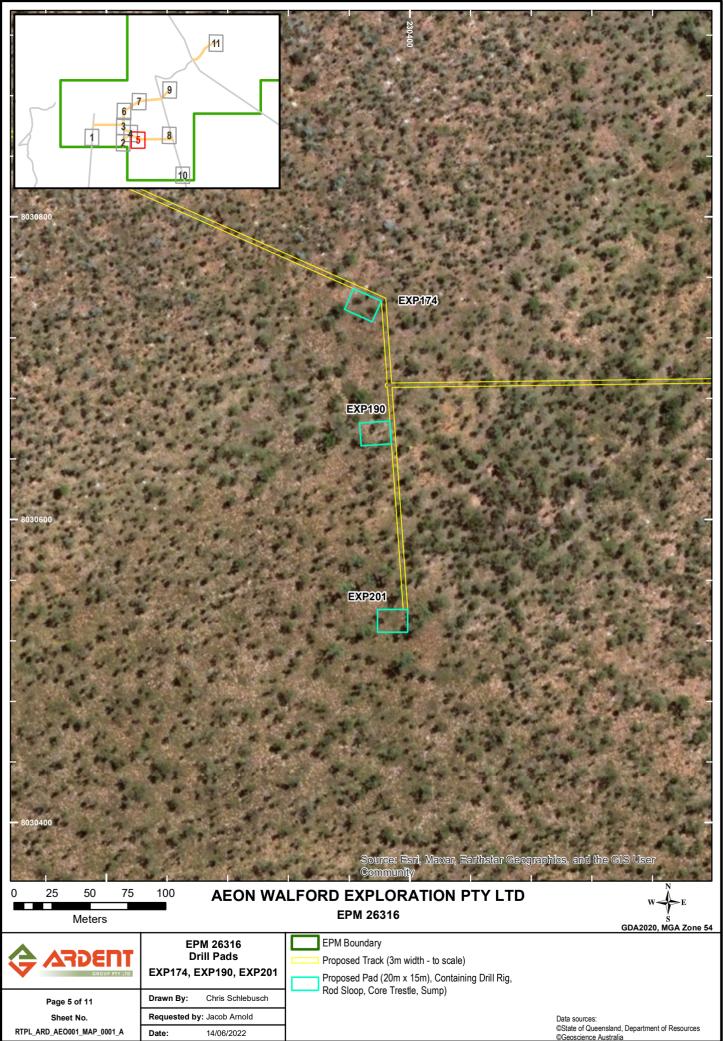


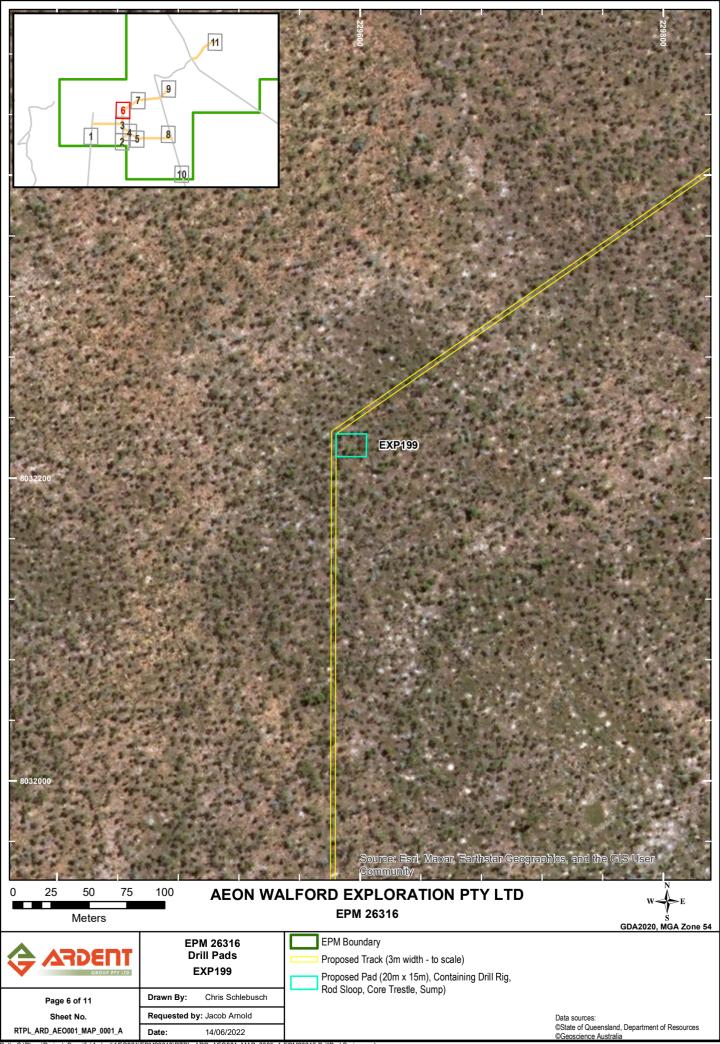


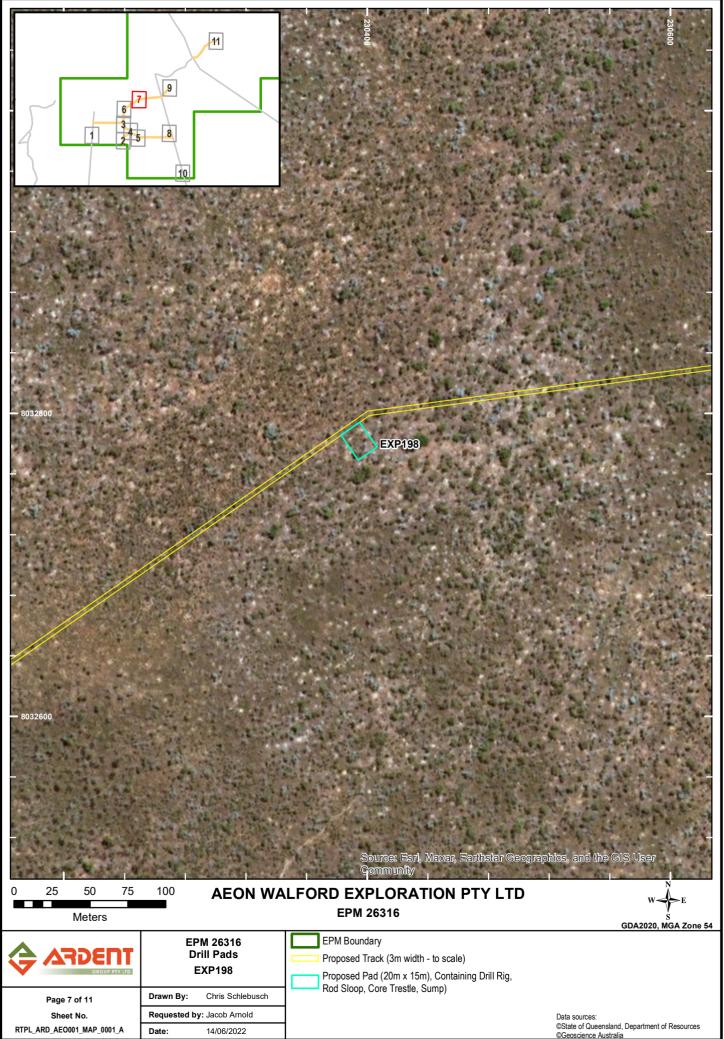
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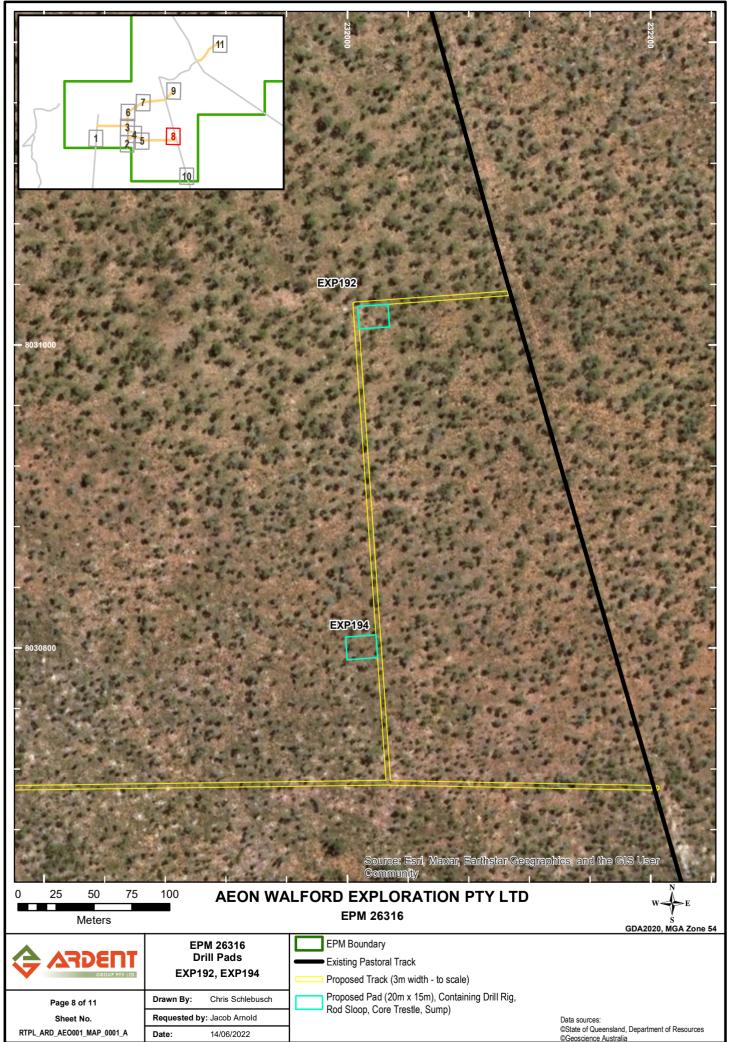


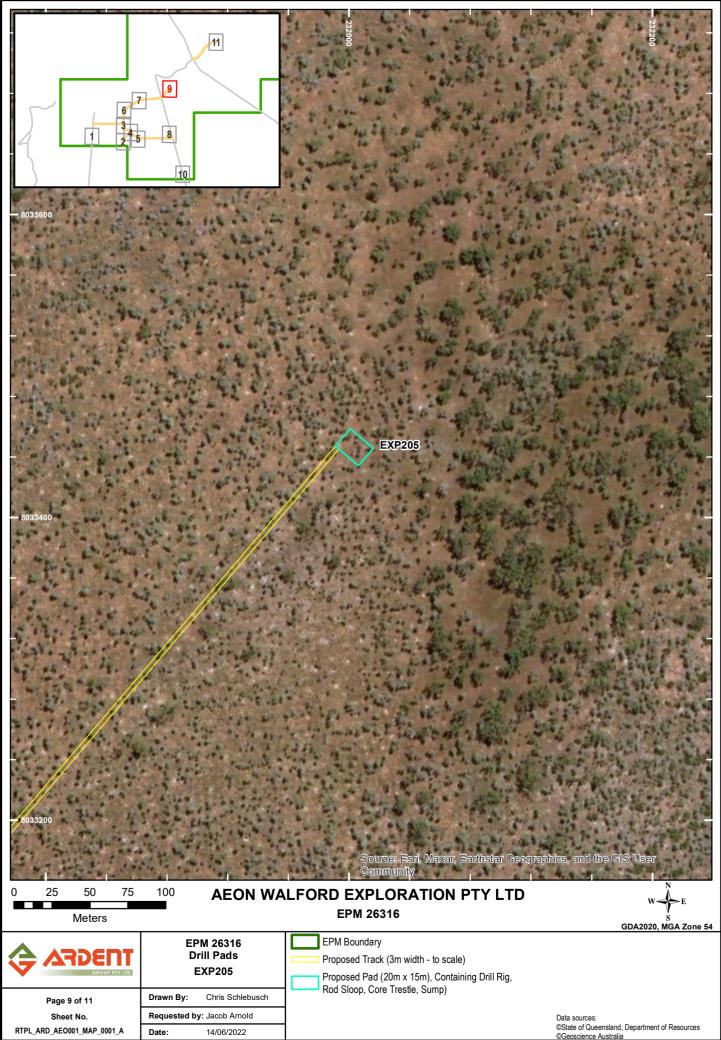
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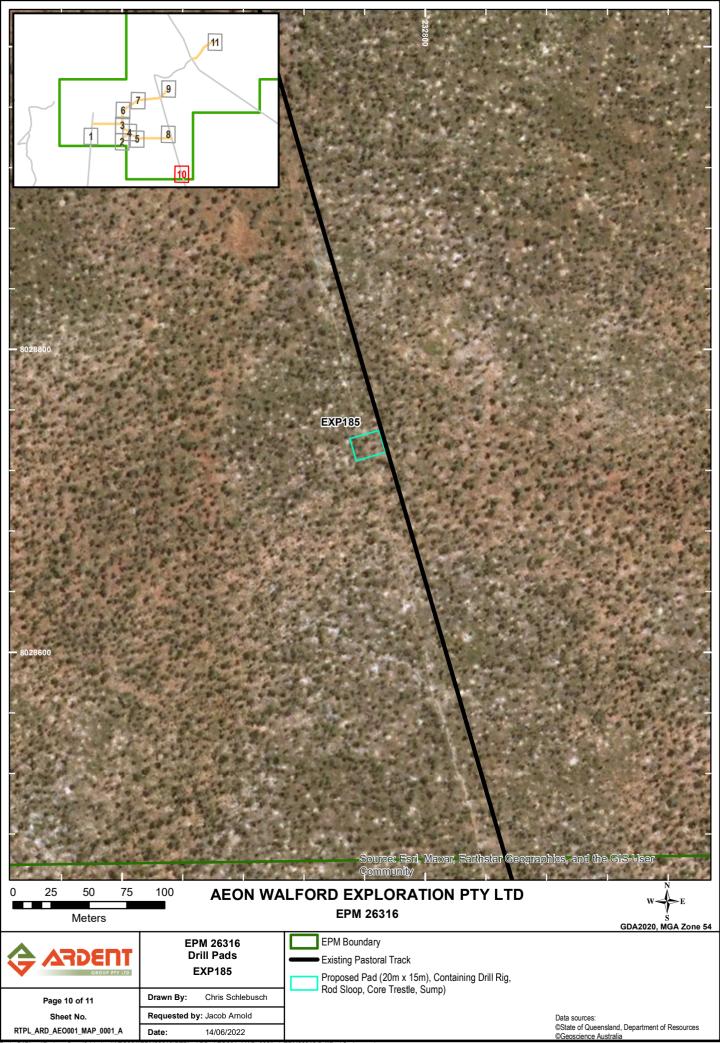


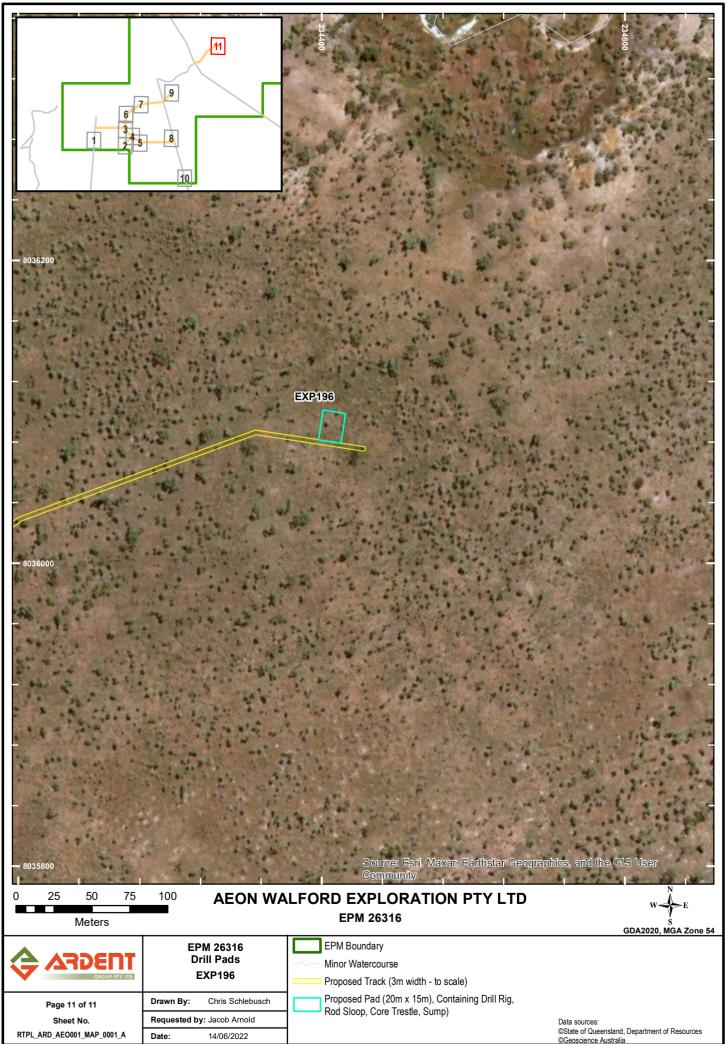






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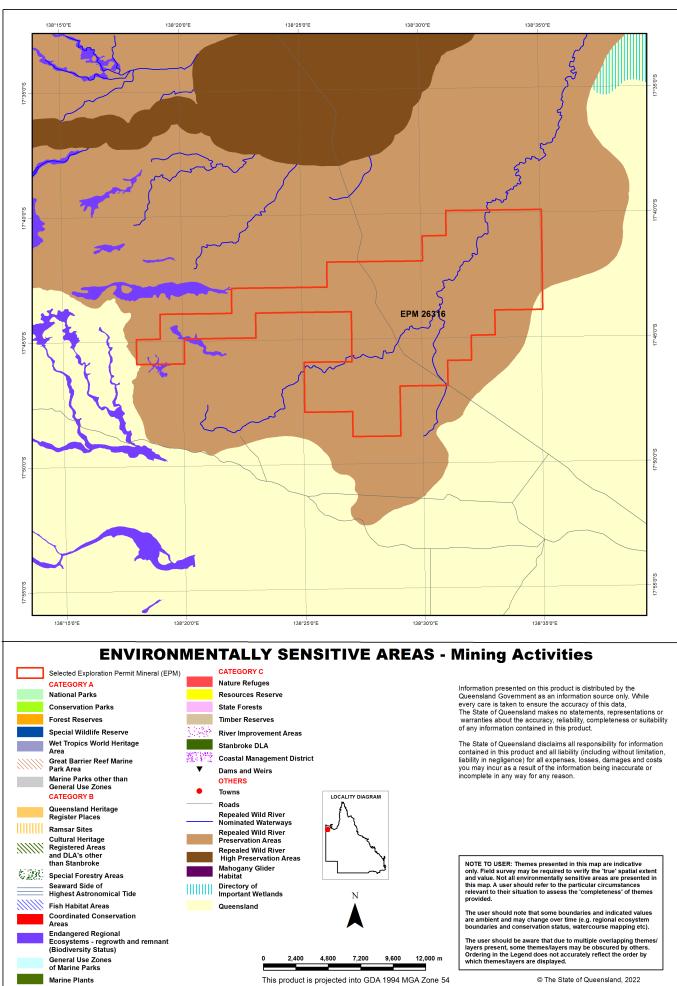






## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

Appendix 3 EPM 26316 Environmentally Sensitive Areas Map

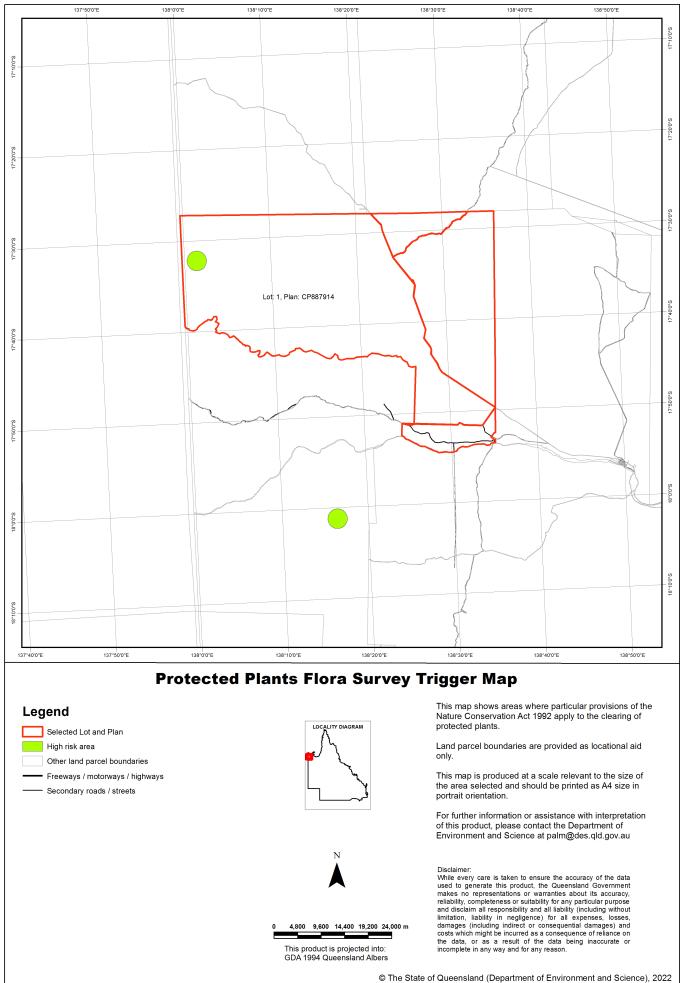


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## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

Appendix 4 Protected Plants Flora Survey Trigger Map





### Protected plants flora survey trigger map

The protected plants flora survey trigger map identifies 'high risk areas' where endangered, vulnerable or near threatened plants are known to exist or are likely to exist. Under the *Nature Conservation Act 1992* (the Act) it is an offence to clear protected plants that are 'in the wild' unless you are authorised or the clearing is exempt, for more information see <u>section 89</u> of the Act.

Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for information on what exemptions may apply in your circumstances, whether you may need to undertake a flora survey, and whether you may need a protected plants clearing permit.

#### Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

#### **Species information**

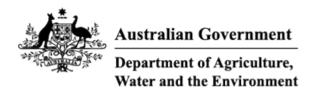
Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the <u>Queensland Spatial Catalogue</u>, the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for more information.





## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

Appendix 5 EPBC Act Protected Matters Search Report



## **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 14-Jun-2022

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements

## Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	12
Listed Migratory Species:	14

### Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	19
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	1
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	1

## Details

## Matters of National Environmental Significance

Listed Threatened Species		[Resource Information]
Status of Conservation Dependent and I	Extinct are not MNES und	er the EPBC Act.
Number is the current name ID. Scientific Name	Threatened Category	Presence Text
BIRD		
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
Erythrura gouldiae		
Gouldian Finch [413]	Endangered	Species or species habitat may occur within area
Falco hypoleucos		
Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
<u>Tyto novaehollandiae kimberli</u>		
Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area

### MAMMAL

### Dasyurus hallucatus

### Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]

Endangered

Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Macroderma gigas		
Ghost Bat [174]	Vulnerable	Species or species habitat may occur
		within area
REPTILE		
Acanthophis hawkei		
Plains Death Adder [83821]	Vulnerable	Species or species
		habitat may occur
		within area
Elseya lavarackorum		
Gulf Snapping Turtle [67197]	Endangered	Species or species
		habitat may occur
		within area
SHARK		
Pristis pristis		
Freshwater Sawfish, Largetooth	Vulnerable	Species or species
Sawfish, River Sawfish, Leichhardt's		habitat may occur within area
Sawfish, Northern Sawfish [60756]		within alea
Listad Mismatany On saisa		
Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	[Resource Information] Presence Text
Scientific Name Migratory Marine Birds	Threatened Category	
Scientific Name Migratory Marine Birds <u>Apus pacificus</u>	Threatened Category	Presence Text
Scientific Name Migratory Marine Birds	Threatened Category	
Scientific Name Migratory Marine Birds <u>Apus pacificus</u>	Threatened Category	Presence Text Species or species
Scientific Name Migratory Marine Birds <u>Apus pacificus</u> Fork-tailed Swift [678]	Threatened Category	Presence Text Species or species habitat likely to occur
Scientific Name Migratory Marine Birds <u>Apus pacificus</u> Fork-tailed Swift [678] Migratory Marine Species	Threatened Category	Presence Text Species or species habitat likely to occur
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus	Threatened Category	Presence Text Species or species habitat likely to occur within area
Scientific Name Migratory Marine Birds <u>Apus pacificus</u> Fork-tailed Swift [678] Migratory Marine Species	Threatened Category	Presence Text Species or species habitat likely to occur
Scientific Name Migratory Marine Birds <u>Apus pacificus</u> Fork-tailed Swift [678] Migratory Marine Species <u>Crocodylus porosus</u> Salt-water Crocodile, Estuarine	Threatened Category	Presence Text Species or species habitat likely to occur within area Species or species
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]	Threatened Category	Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]	Threatened Category         Vulnerable	Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774] Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's		Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat may occur
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774] Pristis pristis Freshwater Sawfish, Largetooth		Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774] Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]		Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat may occur
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678] Migratory Marine Species Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774] Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's		Presence Text Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat may occur

Oriental Cuckoo, Horsfield's Cuckoo [86651]

<u>Hirundo rustica</u> Barn Swallow [662]

Motacilla cinerea Grey Wagtail [642] Species or species habitat may occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
<u>Motacilla flava</u> Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<u>Calidris melanotos</u> Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species
		habitat may occur
		within area

Scientific Name		
Anseranas semipalmata		
Magpie Goose [978]		

### Apus pacificus Fork-tailed Swift [678]

Bubulcus ibis as Ardea ibis Cattle Egret [66521]

Threatened Category **Presence Text** 

> Species or species habitat may occur within area overfly marine area

Species or species habitat likely to occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur

within area

Calidris acuminata Sharp-tailed Sandpiper [874]

Calidris ferruginea Curlew Sandpiper [856]

Calidris melanotos

Pectoral Sandpiper [858]

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly

# Chalcites osculans as Chrysococcyx osculans

Black-eared Cuckoo [83425]

### Charadrius veredus

**Oriental Plover, Oriental Dotterel [882]** 

Critically Endangered

marine area

Glareola maldivarum

**Oriental Pratincole [840]** 

Species or species habitat may occur within area overfly marine area

Haliaeetus leucogaster White-bellied Sea-Eagle [943]

Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Hirundo rustica		
Barn Swallow [662]		Species or species habitat may occur within area overfly marine area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis as Rostratula bengh	alensis (sensu lato)	
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area
Reptile		
Crocodylus johnstoni		
Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area

Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]

Species or species habitat likely to occur within area

## **Extra Information**

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV,	2015/7522	Not Controlled Action	Completed

Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
sthrn two thirds of Australia			

Geological and Bioregional Assessments				
Name	State	Website		
Isa GBA region	QLD	GBA website		

## Caveat

### 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

#### 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

#### 3 DATA SOURCES

#### Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

#### Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

#### 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

## Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales -Department of Environment and Primary Industries, Victoria -Department of Primary Industries, Parks, Water and Environment, Tasmania -Department of Environment, Water and Natural Resources, South Australia -Department of Land and Resource Management, Northern Territory -Department of Environmental and Heritage Protection, Queensland -Department of Parks and Wildlife, Western Australia -Environment and Planning Directorate, ACT -Birdlife Australia -Australian Bird and Bat Banding Scheme -Australian National Wildlife Collection -Natural history museums of Australia -Museum Victoria -Australian Museum -South Australian Museum -Queensland Museum -Online Zoological Collections of Australian Museums -Queensland Herbarium -National Herbarium of NSW -Royal Botanic Gardens and National Herbarium of Victoria -Tasmanian Herbarium -State Herbarium of South Australia -Northern Territory Herbarium -Western Australian Herbarium -Australian National Herbarium, Canberra -University of New England -Ocean Biogeographic Information System -Australian Government, Department of Defence Forestry Corporation, NSW -Geoscience Australia -CSIRO -Australian Tropical Herbarium, Cairns -eBird Australia -Australian Government – Australian Antarctic Data Centre -Museum and Art Gallery of the Northern Territory -Australian Government National Environmental Science Program

-Australian Institute of Marine Science

-Reef Life Survey Australia

-American Museum of Natural History

-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania

-Tasmanian Museum and Art Gallery, Hobart, Tasmania

-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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## RPI DEVELOPMENT APPLICATION SUPPORTING INFORMATION AEON WALFORD EXPLORATION PTY LTD

Appendix 6 Wildlife Online Extract



### WildNet species list

Search Criteria: Species List for a Defined Area Species: All Type: All Queensland status: All Records: All Date: All Latitude: 17.7454 to 17.8147 Longitude: 138.4322 to 138.4964 Email: jacob.arnold@ardent-group.com.au Date submitted: Tuesday 14 Jun 2022 11:33:00 Date extracted: Tuesday 14 Jun 2022 11:40:11

The number of records retrieved = 24

#### **Disclaimer**

Information presented on this product is distributed by the Queensland Government as an information source only. While every care is taken to ensure the accuracy of this data, the State of Queensland makes no statements, representations or warranties about the accuracy, reliability, completeness or suitability of any information contained in this product.

The State of Queensland disclaims all responsibility for information contained in this product and all liability (including liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason. Information about your Species lists request is logged for quality assurance, user support and product enhancement purposes only. The information provided should be appropriately acknowledged as being derived from WildNet database when it is used. As the WildNet Program is still in a process of collating and vetting data, it is possible the information given is not complete. Go to the WildNet database webpage (https://www.qld.gov.au/environment/plants-animals/species-information/wildnet) to find out more about WildNet and where to access other WildNet information products approved for publication. Feedback about WildNet species lists should be emailed to wildlife.online@des.qld.gov.au.

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	А	Records
animals	birds	Artamidae	Cracticus nigrogularis	pied butcherbird		С		1
animals	birds	Cacatuidae	Eolophus roseicapilla	galah		С		1
animals	birds	Cacatuidae	Nymphicus hollandicus	cockatiel		С		1
animals	birds	Campephagidae	Coracina novaehollandiae	black-faced cuckoo-shrike		С		1
animals	birds	Campephagidae	Lalage tricolor	white-winged triller		С		1
animals	birds	Columbidae	Geopelia placida	peaceful dove		С		1
animals	birds	Corvidae	Corvus sp.			С		1
animals	birds	Falconidae	Falco berigora	brown falcon		С		1
animals	birds	Meropidae	Merops ornatus	rainbow bee-eater		С		1
animals	birds	Monarchidae	Myiagra inquieta	restless flycatcher		С		1
animals	birds	Pomatostomidae	Pomatostomus temporalis	grey-crowned babbler		С		1
animals	birds	Psittacidae	Melopsittacus undulatus	budgerigar		С		1
animals	birds	Rhipiduridae	Rhipidura leucophrys	willie wagtail		С		1
plants	land plants	Commelinaceae	Cartonema parviflorum			С		1/1
plants	land plants	Cyperaceae	Schoenoplectiella humillima			С		1/1
plants	land plants	Leguminosae	Acacia hammondii			С		1/1
plants	land plants	Myrtaceae	Melaleuca citrolens			С		1/1
plants	land plants	Poaceae	Aristida holathera var. holathera			С		1/1
plants	land plants	Poaceae	Aristida hygrometrica			С		1/1
plants	land plants	Poaceae	Aristida ingrata			С		1/1
plants	land plants	Poaceae	Digitaria nematostachya			С		1/1
plants	land plants	Poaceae	Enneapogon pallidus	conetop nineawn		С		1/1
plants	land plants	Poaceae	Schizachyrium fragile	firegrass		С		1/1
plants	land plants	Santalaceae	Santalum lanceolatum			SL		1/1

#### CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the Nature Conservation Act 1992. The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).

A - Indicates the Australian conservation status of each taxon under the Environment Protection and Biodiversity Conservation Act 1999. The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).

This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.

