



HANKING GOLD
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HANKING GOLD PTY LTD

GOLDEN PIG NVCP APPLICATION SUPPORTING DOCUMENT

M77/109, M77/1016, M77/535 & M77/552

July 2026



ACRONYMS

Acronym	Definition
BAM Act	Biosecurity and Agriculture Management Act
BC Act	<i>Biodiversity Conservation Act 1999</i>
BOM	Bureau of Meteorology
COO	Coolgardie bioregion
COO2	Southern Cross sub-region
Cygnnet	Cygnnet Gold Pty Ltd
DBCA	Department of Biodiversity, Conservation and Attractions
DMPE	Department of Mines, Petroleum and Exploration
DWER	Department of Water and Environmental Regulation
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i>
ha	Hectare
Hanking	Hanking Gold Pty Ltd
IBRA	Interim Biogeographic Regionalisation for Australia
kl	Kilolitres
m	metre
NVCP	Native Vegetation Clearing Permit
WAH	Western Australian Herbarium
WoNS	Weeds of National Significance

EXECUTIVE SUMMARY

Project: Golden Pig to Lake Koorkoordine pipeline

Area Proposed to be Cleared: Up to 3 hectares (ha) within a 43.6ha purpose permit area.

Purpose of Clearing: Dewatering pipeline installation

Hanking Gold Pty Ltd (Hanking), the parent company of Cygnet Gold Pty Ltd (Cygnet), propose to further develop the Golden Pig deposit, part of its Cygnet tenement package located near Southern Cross in the eastern part of the Wheatbelt region of Western Australia (Figure 1).

The clearing of native vegetation within the Proposed Clearing Permit Area requires submission of a Native Vegetation Clearing Permit (NVCP) application, and subsequent approval by the Department of Mines, Petroleum and Exploration (DMPE), in accordance with s 51E of the *Environmental Protection Act 1986* (EP Act). The purpose of this report is to support the NVCP application, which seeks approval for the clearing of up to 3 ha of native vegetation within the Proposed Clearing Permit Area.

An assessment against the Schedule 5, Principles for clearing native vegetation of the EP Act was undertaken. The proposed clearing is not at variance to clearing principles (c), (d) and (e), unlikely to be at variance to principles (a), (b), (g), (h), (i), and (j), and may be at variance to principle (f).

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1. INTRODUCTION

Hanking propose to further develop the Golden Pig deposit, part of its Cygnet tenement package located near Southern Cross in the eastern part of the Wheatbelt region of Western Australia (Figure 1).

Hanking have prepared this EP Act Part V NVCP supporting document for the DMPE to seek approval for clearing native vegetation on mining tenements M77/109, M77/1016, M77/535, and M77/552. This document has been prepared to support the NVCP application, which seeks approval for the clearing of up to 3.0 ha of native vegetation within a 43.6 ha proposed Purpose Permit Area located on these tenements (Figure 2).

The application for the NVCP (Purpose Permit) is based primarily on the findings of the Golden Pig Flora and Fauna Assessment undertaken by ACOEM in 2023.

1.1. DOCUMENT PURPOSE

The purpose of this document is to provide the necessary information and justification, as prescribed within the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* to seek approval under Part V of the EP Act for the clearing of native vegetation.

This NVCP document is structured to provide the following information:

- Description and map of the Purpose Permit Area proposed for clearing regarding location, size and purpose.
- Site overview with a brief description of local climate, biogeographic region, geology, land use and land systems, soils, hydrology and hydrogeology.
- Description of the proposed Purpose Permit Area to be cleared regarding vegetation type, condition and representation in a regional context.
- Identification of any significant flora within the proposed Purpose Permit Area.
- Description of broad fauna habitat within the proposed Purpose Permit Area.
- Discussion of proposed vegetation clearing in relation to the EP Act Schedule 5, 10 clearing principles.

2. TENEMENT HOLDER AUTHORISATION

The proposed Purpose Permit Area lies within the below tenements in Table 1 and displayed in Figure 2 & 3.

Table 1. Applicable tenement details

Tenement	Holder	Area (Ha)	Grant Date	Expiry date
M77/1016	Cygnet Gold Pty Ltd	23.60	02/12/2003	01/12/2045
M77/535	Cygnet Gold Pty Ltd	80.27	26/03/1993	25/03/2035
M77/552	Cygnet Gold Pty Ltd	31.85	10/10/1994	09/10/2036
M77/109	Barto Gold Mining Pty Ltd	254.8	13/03/1987	12/03/2029

All mining tenements are owned wholly by Cygnet (which is a subsidiary of Hanking) except for M77/109, in which Barto Gold Pty Ltd is the registered owner on Mineral titles Online (MTO). Cygnet purchased the northern half of this tenement (Figure 2) and as such, a rights agreement is in place with Barto Gold. This formal agreement has been provided previously to DMPE under the MDCP proposal in 2025 (Reg ID: 500215) and can be provided again on request.

2.1. CONTACT DETAILS

All compliance and regulatory correspondence should be forwards by email to the following address:

Contact Person: Jack Harma

Environmental Manager

Email: jack.harma@hanking.com.au

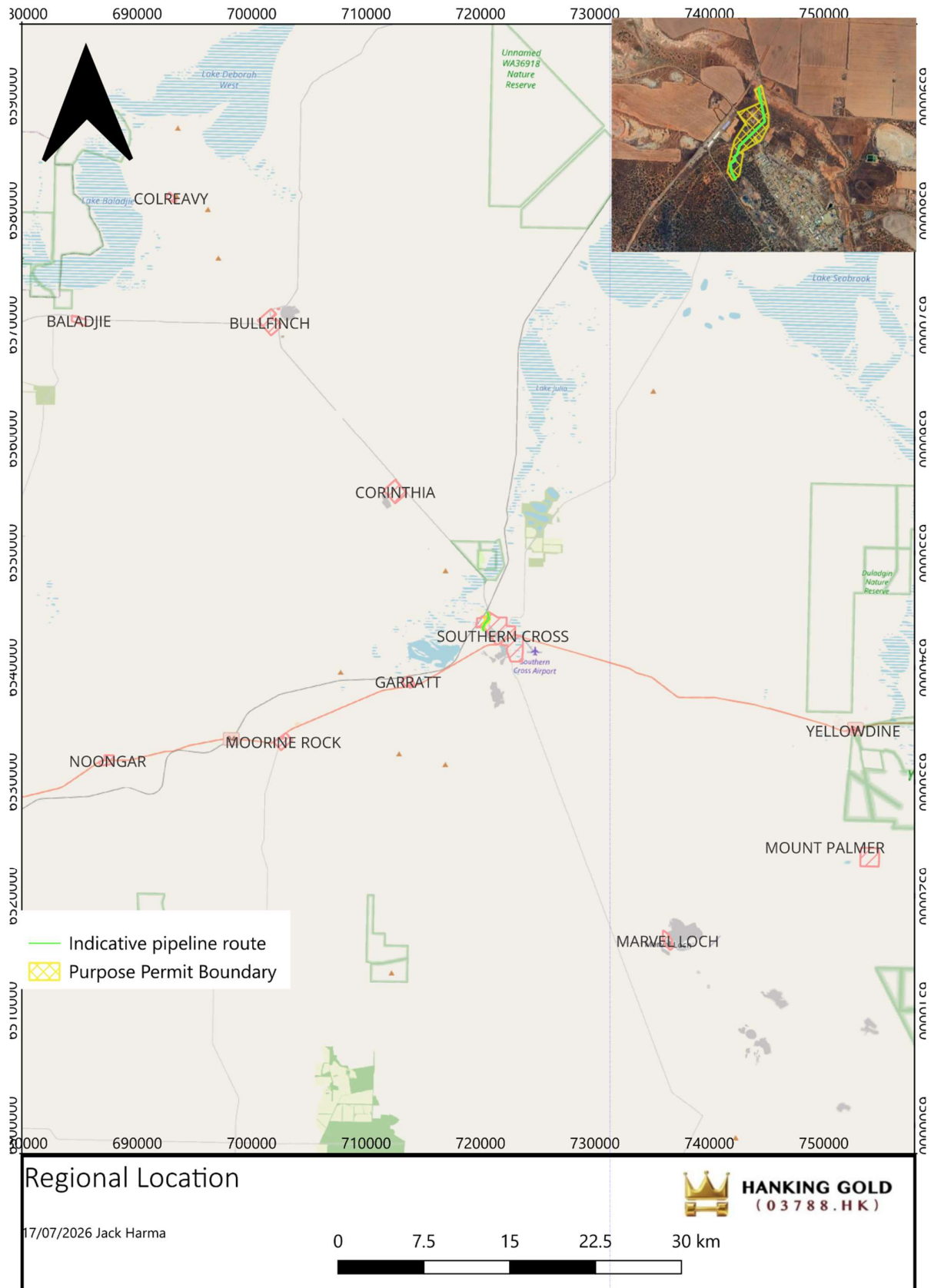


Figure 1: Regional Location



Figure 2: Respective ownership of mining tenement M77/109

3. PROPOSED ACTIVITIES

Hanking is proposing to further develop its Golden Pig Project to extract gold ore for processing at their planned Corinthia Processing Mill. To commence any mining activity from the Golden Pig underground operation, dewatering of the existing and future workings is required. As such, a pipeline is required for dewatering activities. This was approved by the Department of Water and Environmental Regulation (DWER), and a Works Approval was issued in October 2025, W2960/2025/1. As the pipeline footprint disturbance was not specifically requested within the Works Approval application, a NVCP is required for the disturbance.

3.1. PURPOSE PERMIT AREA

Hanking propose to clear up to 3.0 ha of native vegetation within the 43.6 ha proposed Purpose Permit Area. An indicative pipeline route within the Purpose Permit Area is shown in Figure 2.



Figure 3: Indicative pipeline route within the Purpose Permit Area

4. EXISTING ENVIRONMENT

4.1. BIOGEOGRAPHIC REGION

The interim biogeographic regionalisation of Australia (IBRA) classifies Australia's landscapes into 89 geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information.

The proposed pipeline route from Golden Pig to Hanking's discharge point approved by DWER is located within the Coolgardie IBRA (COO). This region is further broken down into sub-regions with the project located within the Southern Cross sub-region (COO2) (Figure 4). The Southern Cross subregion is described as having subdued relief, comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. The valleys include chains of saline playa-lakes. Diverse *Eucalyptus* Woodlands (*Eucalyptus salmonophloia*, *Eucalyptus salubris*, *Eucalyptus transcontinentalis* and *Eucalyptus longicornis*) rich in endemic eucalypts occur around these salt lakes, as well as on the low greenstone hills, valley alluvials and broad plains of calcareous earths (Cowan *et al.* 2001).

Dwarf shrublands of samphire are associated with salt lakes within the Southern Cross subregion. Granite basement outcrops occur at mid-levels in the landscape and support swards of *Borya constricta* with stands of *Acacia acuminata* and *Eucalyptus loxophleba*. The yellow sandplains, gravelly sandplains and lateritic breakaways of the uplands support mallees (*Eucalyptus leptopoda*, *Eucalyptus platycorys* and *Eucalyptus scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata*, *Callitris preissii*, *Melaleuca uncinata* and *Acacia beauverdiana*) (Cowan *et al.* 2001). Significant vertebrate fauna that may occur include the Chuditch (*Dasyurus geoffroii*) (Vu; Vu) and the Malleefowl (*Leipoa ocellata*) (Vu; Vu).

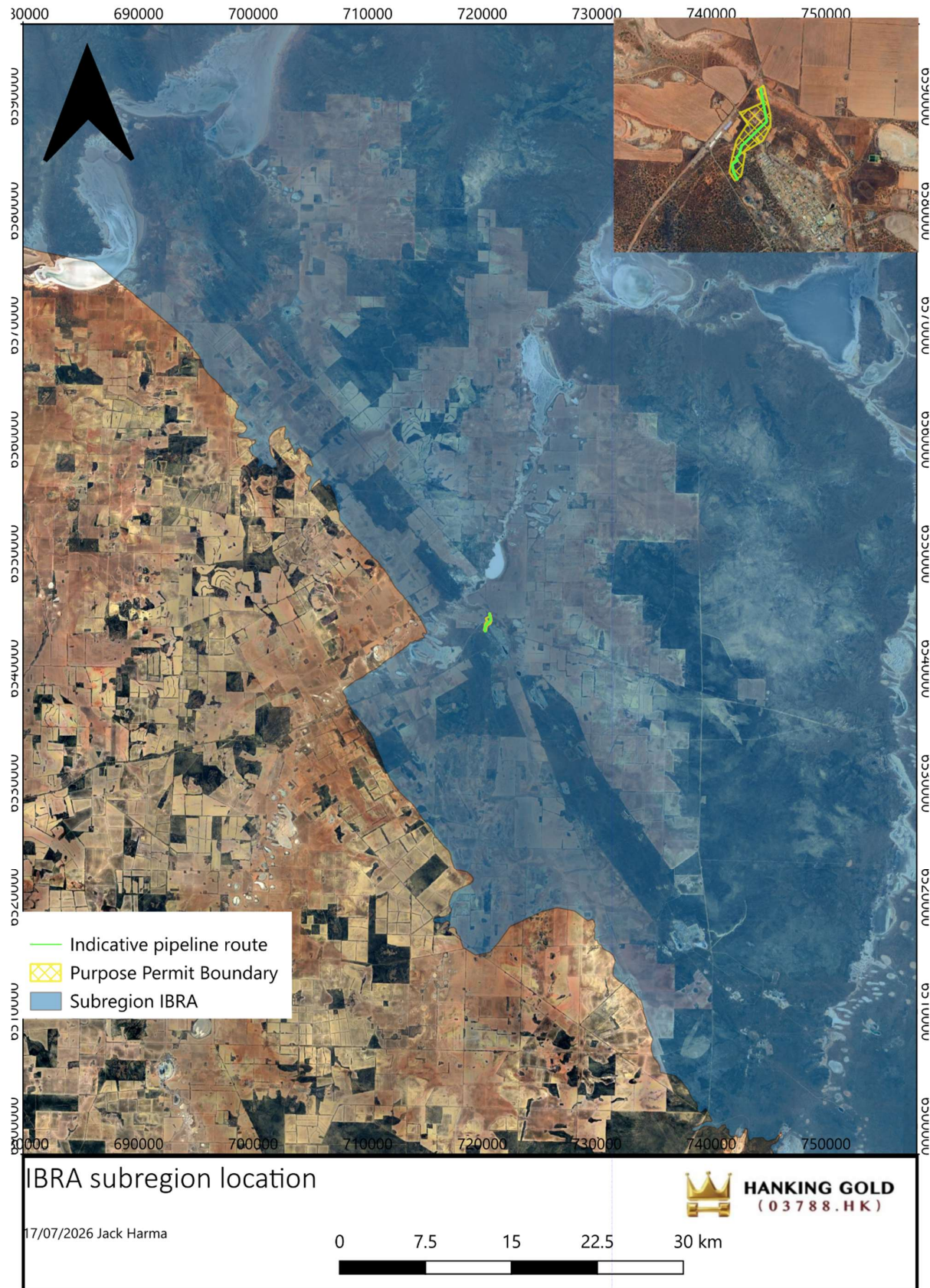


Figure 4: IBRA subregional location of Southern Cross (COO2)

4.2. CLIMATE

Golden Pig is located adjacent to the township of Southern Cross which experiences an arid to semi-arid, dry to warm Mediterranean climate. It is not uncommon for above ground temperatures to exceed 35°C during the summer months and dipping below 0°C during the winter months. Climate data available from 1996 to 2025 from the Australian Bureau of Meteorology (BoM) climate station at Southern Cross Airfield (station number 012320) highlights the seasonal temperature fluctuation. Mean maximum monthly temperatures for June, July and August are between 16 to 18°C and for December to February range from 33 to 35°C. Mean minimum temperatures are below 5°C during the winter months of June to August and are consistently above 15°C through the December and March summer period.

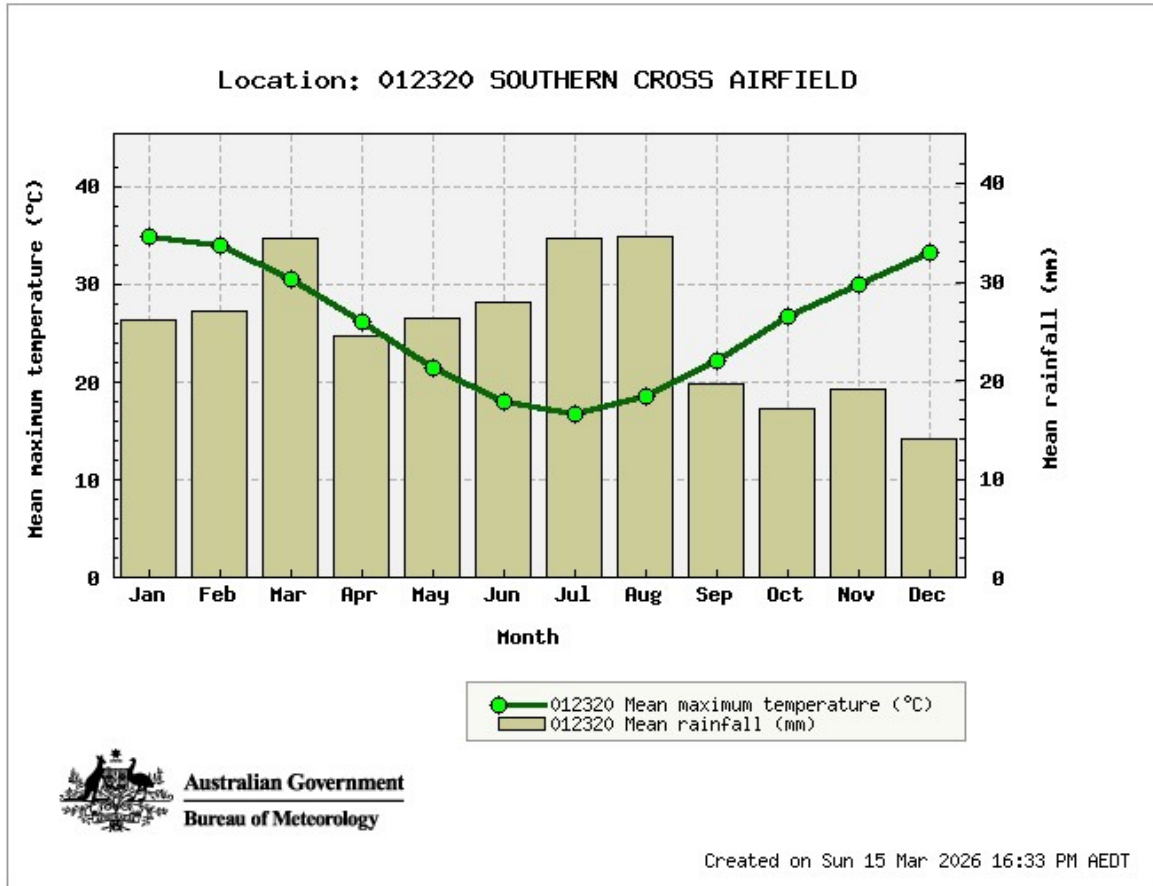


Figure 5: monthly climate data for Southern Cross weather station 12320 1996-2025

Large rainfall events can occur in the summer months; these are generally triggered by cyclonic weather events in the north or are local thunderstorms. Mean monthly 'Class A pan' evaporation exceeds mean monthly rainfall for all months and by an order of magnitude over the summer months. As annual rainfall only accounts for 10% of the annual potential evaporation, perennial surface water bodies in the area are uncommon. Intermittent, and generally short duration, surface runoff flows can be expected to occur following large rainfall events. The high rate of evaporation plays a major role in the formation of salt lakes and saline groundwater within the wider area (EMM, 2023).

Predominant wind directions vary according to the time of day and year (Figure 6 and Figure 7 below). Winds originating from the south-easterly sectors occur most frequently during summer, autumn, and spring. Winds from the north-easterly sectors are dominant during winter.

9 am
10566 Total Observations
Calm 4%

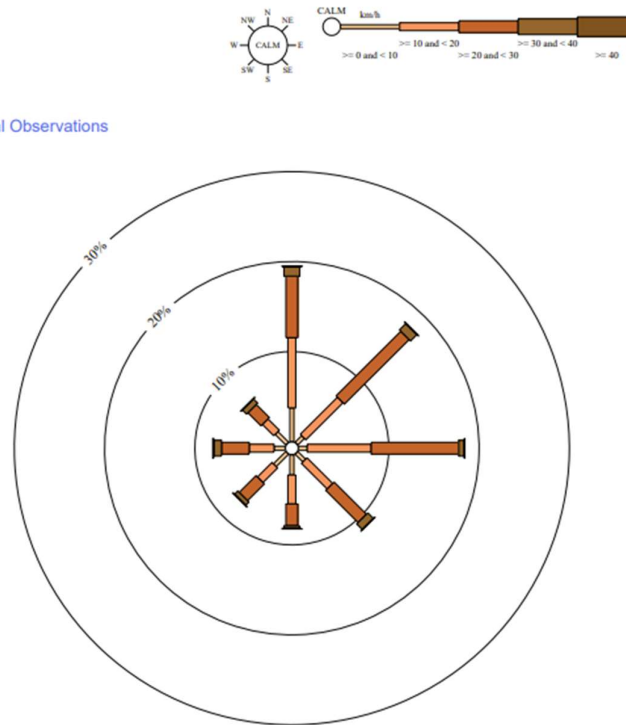


Figure 6: 9am annual wind rose for Southern Cross weather station BOM 12320

3 pm
10545 Total Observations
Calm *

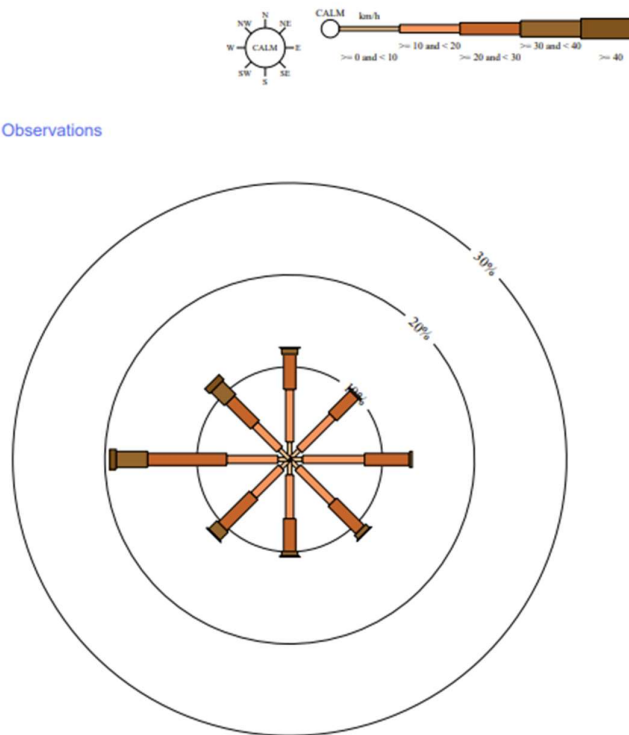


Figure 7: 3pm annual wind rose for Southern Cross weather station BOM 12320

4.3. LAND USE

Land use in the wider area is predominantly for agriculture purposes such as cropping and grazing (Cowan *et al.* 2001). Crown Reserves and mining are also other dominant land uses in the areas surrounding Southern Cross, with numerous small and abandoned mines and open shafts dotted across the Yilgarn landscape. The Golden Pig indicative pipeline route covers crown reserves of varying descriptions, unallocated crown land, and road reserves.

4.4. CONSERVATION RESERVES AND ENVIRONMENTAL SENSITIVE AREAS

No conservation reserves or environmentally sensitive areas are intersected by the proposed pipeline route.

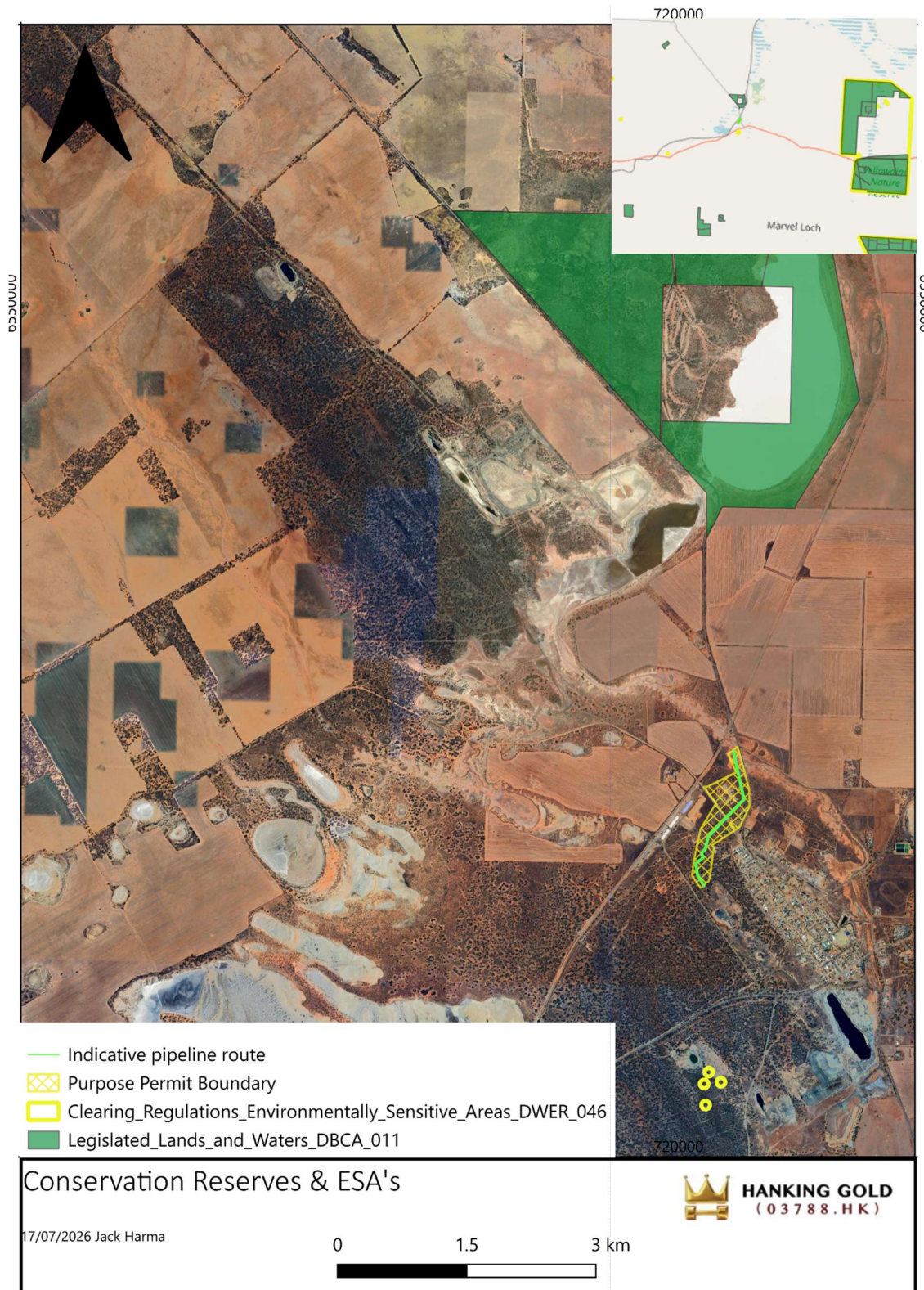


Figure 8: Conservation Reserves and Environmentally Sensitive Areas near the indicative pipeline route.

4.5. LAND SYSTEMS & SOIL LANDSCAPES

Land systems are defined as an area or group of areas throughout which there is a recurring pattern of topography, soils and vegetation (Tille, 2006). An assessment of land systems provides an indication of the occurrence and distribution of vegetation types (Purdie et al, 2004) within and surrounding the proposed Purpose Permit Area.

Table 2: Atlas land systems within the Purpose Permit boundary.

Land System	Description	Extent within the Purpose Permit Area	
		Extent (ha)	Proportion (%)
Atlas System			
BB5	Rocky ranges and hills of greenstones (basic igneous rocks): chief soils seem to be shallow calcareous loamy soils (Um5.11) and similar soils with shallow brown and grey-brown calcareous earths (Gc1.12) and (Gc1.22), below which weathered rock occurs at shallow depths. Associated soils are not described but may include alkaline red earths (Gn2. 13)	4.893	11.22
DD15	Undulating plains with some low dunes, seasonal lakes, and clay pans: chief soils seem to be brown and grey- brown calcareous earths.	30.624	70.23
SV2	Saline valleys with some dunes including barchan forms-salt lake channels, mostly devoid of true soils, and their fringing areas.	8.036	18.55
Total		46.3Ha	100%

In addition to the defined land systems above, three soil landscapes as defined by DPIRD, are present within the purpose permit boundary area and summarised below and depicted in Figure 9:

- Greenmount System: Gently undulating rises to rolling low hills in the eastern Zone of Ancient Drainage. Loamy earth. Red calcareous and clayey and stoney.
- Garratt System: Lower slopes and foot slopes adjacent to salt lakes in the eastern Zone of Ancient Drainage. Loamy earth (mostly calcareous) hard cracking clay and alkaline shallow duplex, and
- Lake Deborah System: Broad valley floor dominated by salt lakes with minor dunes, north-east of Southern Cross. Salt Lake soils and calcareous loamy earths.

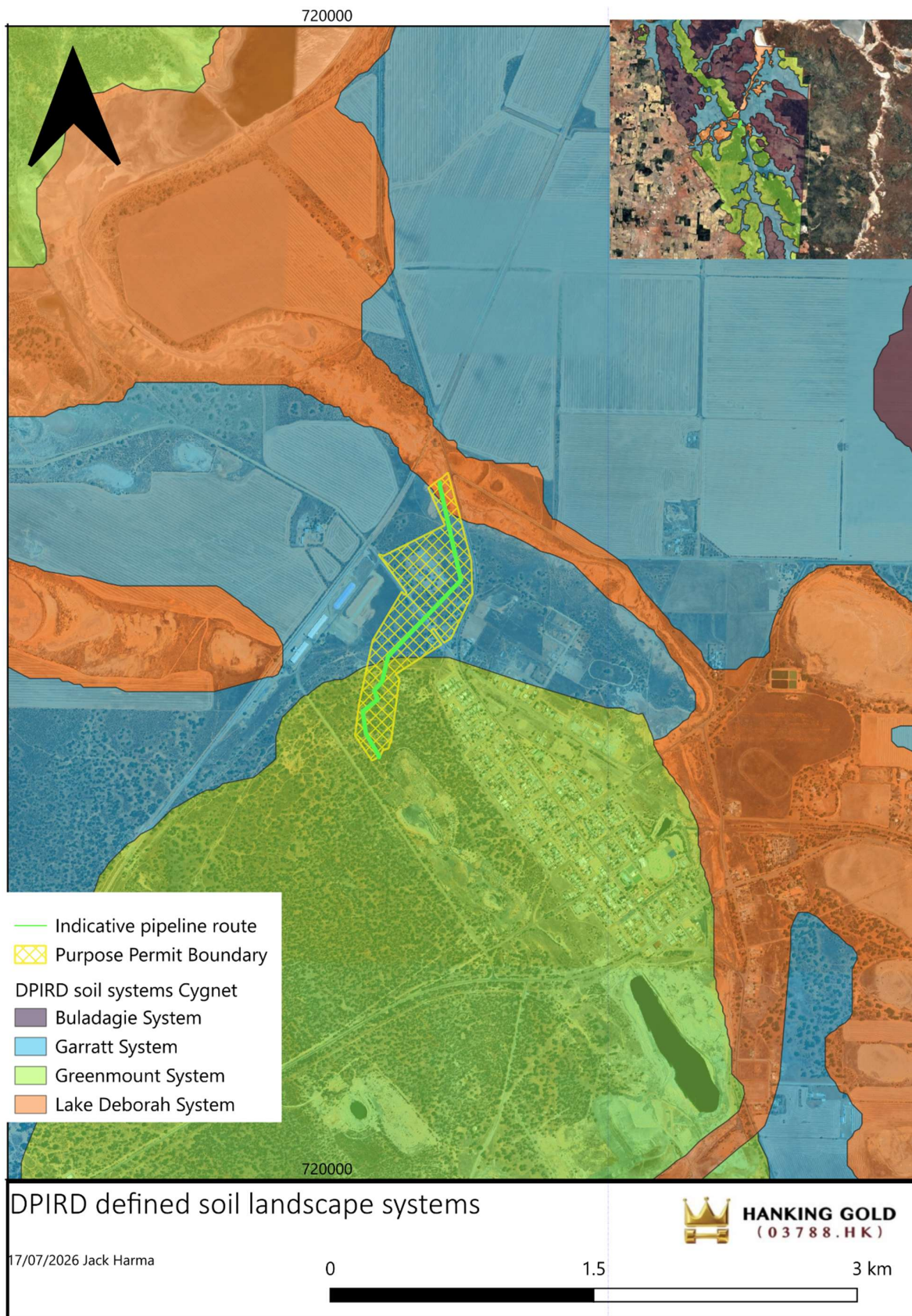


Figure 9: DPIRD soil landscape systems

4.6. SURFACE WATER & HYDROLOGY

The southern cross IBRA subregion, (COO2) has occluded drainage with any excess water after significant rainfall draining into salt lakes (Cowan, 2001). The purpose permit area occurs within the Lake Julia sub catchment of the wider Swan-Avon River catchment.

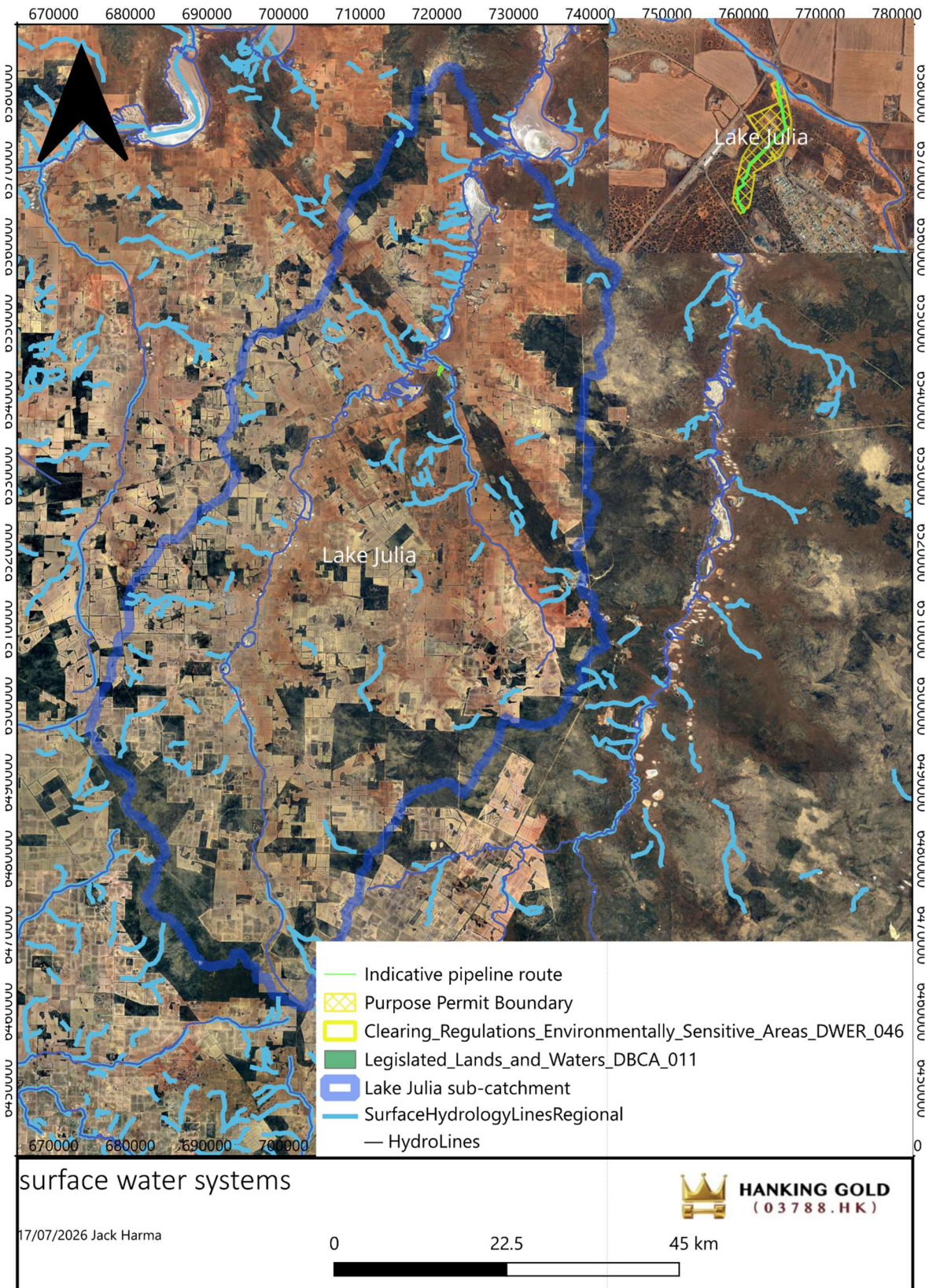


Figure 10: Surface Water Systems

4.7. GROUNDWATER

The DWER water register identifies that Cygnet operational areas encompass palaeochannel aquifers and fractured rock aquifers. The palaeochannel sands or alluvium are the major aquifers in the region and are frequently targeted for mine water supply as they can provide stable, long-term sustainable yields due to 'high' permeability (yield potential of up to 1,500 kL/day), large groundwater storage and significant leakage from the overlying clays and surrounding basement rock.

The groundwater quality in palaeochannel aquifers is generally poor, ranging from saline to hypersaline (10,000 - >35,000mg/L TDS) however, most of the groundwater salinity is much higher.

Within the region of Golden Pig three major groundwater aquifer systems have been identified:

Superficial aquifers associated with, lacustrine and laterite deposits that are typically only partly saturated and dependent in intermittent rainfall.

Palaeochannel sands that are major aquifers of the region and can provide stable, long-term yields from sands/gravels at the base of present-day drainage systems or just offset following palaeodrainage systems; and

Bedrock aquifers occurring in fractured bedrock, granite, or greenstone basement rock where the storage potential is related to the depth of weathering and zone of fracture development. Background on surface water quality.

5. ENVIRONMENTAL VALUES

AECOM Consulting was engaged to undertake a flora, vegetation and fauna assessment for the Golden Pig project during Spring 2023 which included the indicative pipeline route and the wider purpose permit area. The 2024 report is provided in Appendix A. The survey area covered 732.53Ha in total and this area is depicted in Figure 11 below.

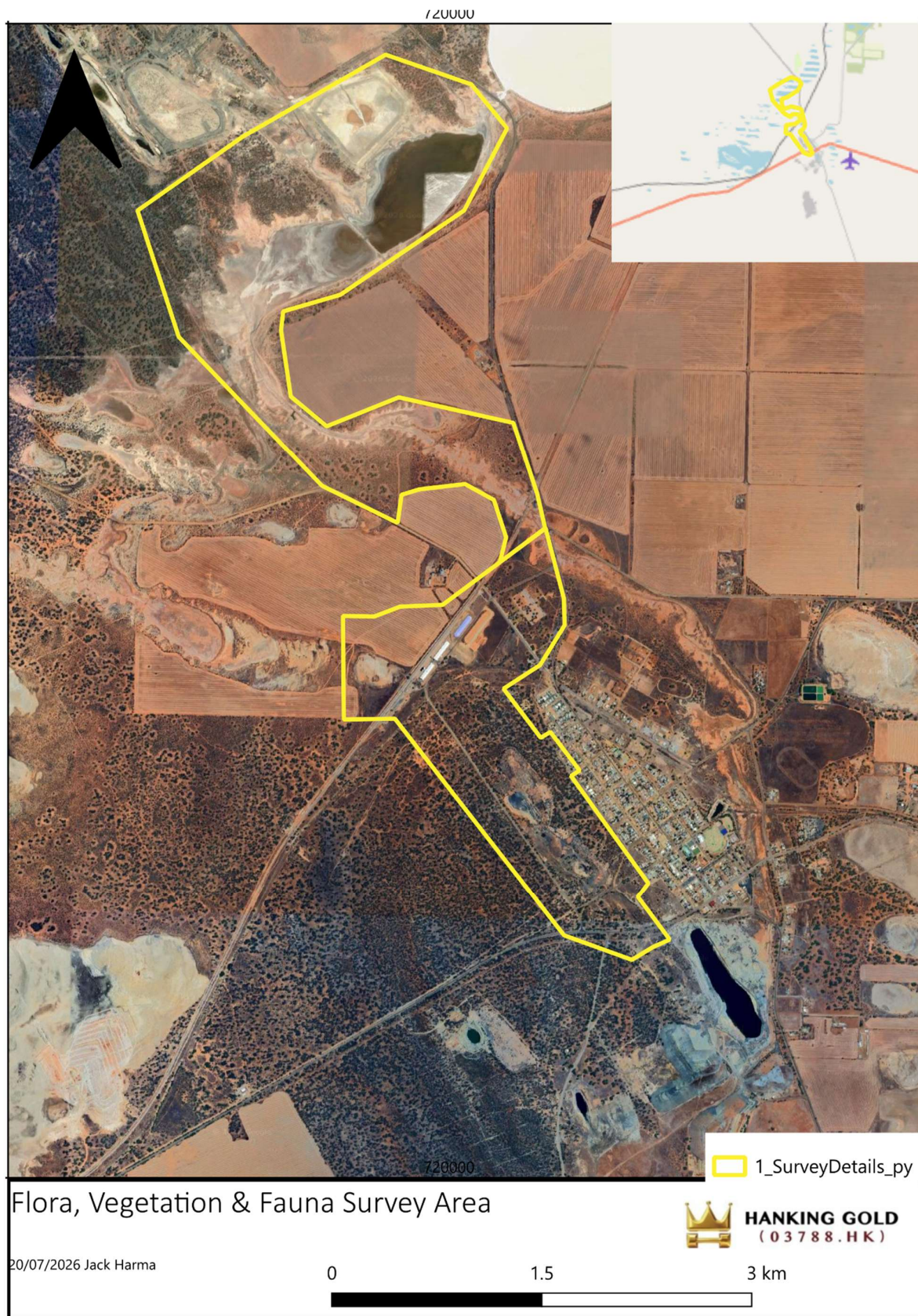


Figure 11: AECOM survey area

5.1. FLORA & VEGETATION DESKTOP ASSESSMENT

A desktop assessment was undertaken prior to the field survey to identify significant environmental values likely to be present in the survey area including flora and vegetation communities. Database searches were requested from the following government agencies;

- Department of Biodiversity, Conservation and Attractions (DBCA) Threatened Species and Communities database including Threatened and Priority flora, communities and Threatened and Priority fauna (50 km buffer from the survey area) under the Biodiversity Conservation Act (BC Act).
- Western Australian Herbarium (WAH, 1998) records.
- Environment Protection and Biodiversity Conservation (EPBC) Act Protected Matters Search Tool (PMST) (20 km buffer from survey area).
- Public domain including Index of Biodiversity Surveys for Assessments (IBSA), Environmental Protection Authority (EPA) and DWER websites
- Stantec (2020) Glendower Flora, Vegetation and Fauna Assessment.
- Rhapsody (2023) Native Vegetation Clearing Permit including supporting flora and fauna assessment
- APM (2014) Southern Cross Goldfields Fauna Assessment

A total of 51 significant flora species were identified in the desktop study. This included 19 species listed as Threatened under the EPBC Act and BC Act, and 32 species listed as Priority by DBCA.

The likelihood assessment determined that:

- two species had a High likelihood of occurrence
- 20 species had a Moderate likelihood of occurrence
- 7 species had a Low likelihood of occurrence
- 22 species were considered Negligible in the absence of suitable habitat.

5.2. FLORA & VEGETATION FIELD SURVEY

A single-phase detailed flora and vegetation assessment was undertaken in accordance with methodology outlined in the Flora Survey Technical Guide (EPA, 2016). The field survey was undertaken between the 23 to 25 November 2023.

The entire survey area was traversed on foot using systematic linear traverses to conduct targeted flora searches. Floristic data was collected from nine non-permanent 50 x 50 meter (m) quadrats and nine unbounded relevés. Data collected at quadrats and relevés included:

- date
- location using hand-held GPS (accuracy of 5 m)
- sample site type and size
- photograph (north-west corner)
- soil details (type, colour, moisture)
- landform
- vegetation condition
- fire history

- species list including:

estimated height, estimated percentage cover (for trees both percentage within relevé and within community was recorded to enable better description of vegetation community).

Any species unable to be identified in the field were collected for identification in AECOM's in-house herbarium and the specimens and taxonomic references and keys at the WAH. Naming of species followed the convention of the WAH (1998).

Vegetation communities were described and mapped based on changes in dominant species composition and landform. Vegetation community descriptions were based on the Association Level V in accordance with the National Vegetation Information System (NVIS) Framework (DotEE, 2017a). Delineation of vegetation communities was supported by analysing floristic data collected within quadrats.

The software package Primer-E was used to compare floristic data from sample sites. Both relevés and quadrats were considered to determine the relationship of each site to one another. The similarity matrix used both Bray-Curtis and Euclidian distance measures to produce Dendrograms which are presented in this document.

Vegetation condition was determined using the Keighery (1994) vegetation condition scale as recommended in the *Flora Survey Technical Guide* (EPA, 2016).

5.3. FAUNA DESKTOP ASSESSMENT

A total of 32 Threatened, Priority and Migratory fauna species were identified in the desktop database searches. This included 16 bird, nine mammal, five invertebrate and two reptile species. Oceanic or strictly marine species were excluded from the desktop assessment as the survey does not include marine waters.

The likelihood assessment determined that:

- four species had a High likelihood of occurrence
- one species had a Moderate likelihood of occurrence
- 16 species had a Low likelihood of occurrence
- 11 species were considered Negligible in the absence of suitable habitat.

5.4. FAUNA FIELD SURVEY

The fauna survey was undertaken simultaneously with the flora and vegetation assessment.

Fauna habitat assessments were completed throughout the survey area and were used to define the structure, complexity, and continuity of the habitat present, and documented the presence and abundance of habitat features that included but were not limited to presence or absence of large mature trees, water bodies, dense vegetation, hollows, and leaf litter. Any Malleefowl mounds or other significant fauna habitat features were also recorded to inform this assessment.

The habitat assessment was used to verify the findings in the desktop survey as per the EPA (2020) Technical Guidance. Potential usage within the survey area by conservation significant fauna species was recorded, primarily focusing on suitable and/or core habitat and any ecological values that may support likelihood of occurrence. Any observations were recorded using a hand-held GPS (accuracy of 5 m).

In addition to recording observed fauna and birds identified from distinctive calls, details of indirect evidence such as scats, tracks and diggings were documented. Attention was given to searching for conservation

significant species identified in the desktop assessment as having the potential to occur in the area. All observations were made between daylight hours of 0700 and 1700.

The taxonomy and nomenclature of vertebrate species is consistent with the Western Australian Museum's Checklist of Vertebrates of Western Australia (2023) and the Australian Faunal Directory for bird species.

5.5. FIELD SURVEY RESULTS

5.5.1. VEGETATION COMMUNITIES

Six vegetation communities were defined and mapped including the following and can be seen in Figure 12:

three Eucalypt Woodlands EyAnAe, EyEsMt and EsDvarC

one Eucalypt Mallee Woodland EmMiRc recorded on slopes near Tecticornia Samphire Shrubland.

one Tecticornia Samphire Shrubland TpDcc recorded at the edge of the salt lake.

One Maireana Chenopod Shrubland EsMt representing lower slopes / floodplain

The survey area is not in the Avon Wheatbelt. As such, none of the vegetation communities represent the Eucalypt Woodlands of the WA Wheatbelt TEC.

5.5.2. VEGETATION CONDITION

Vegetation condition within the survey area varied from Completely Degraded to Very Good with most of the native vegetation (excluding cleared areas) mapped as Very Good (335.32 ha, 46%). Disturbance was evident from previous mining activities and edge effects from adjacent land use (predominantly agriculture and the township of Southern Cross). Weed invasion was notably low despite numerous sources present. Private property access was not granted in some cases, denoted as "not accessed" in the table below.

Table 3: Vegetation condition extent

Condition	Extent (ha)	Proportion (%)
Very Good	335.32	46
Good	152.04	20
Degraded	43.14	4
Completely Degraded	40.35	6
Not accessed	42.84	6
Cleared	133.67	18

Adjacent land use context was used to assess condition, including altered hydrology, sedimentation, and the tracks intersecting the salt lake.

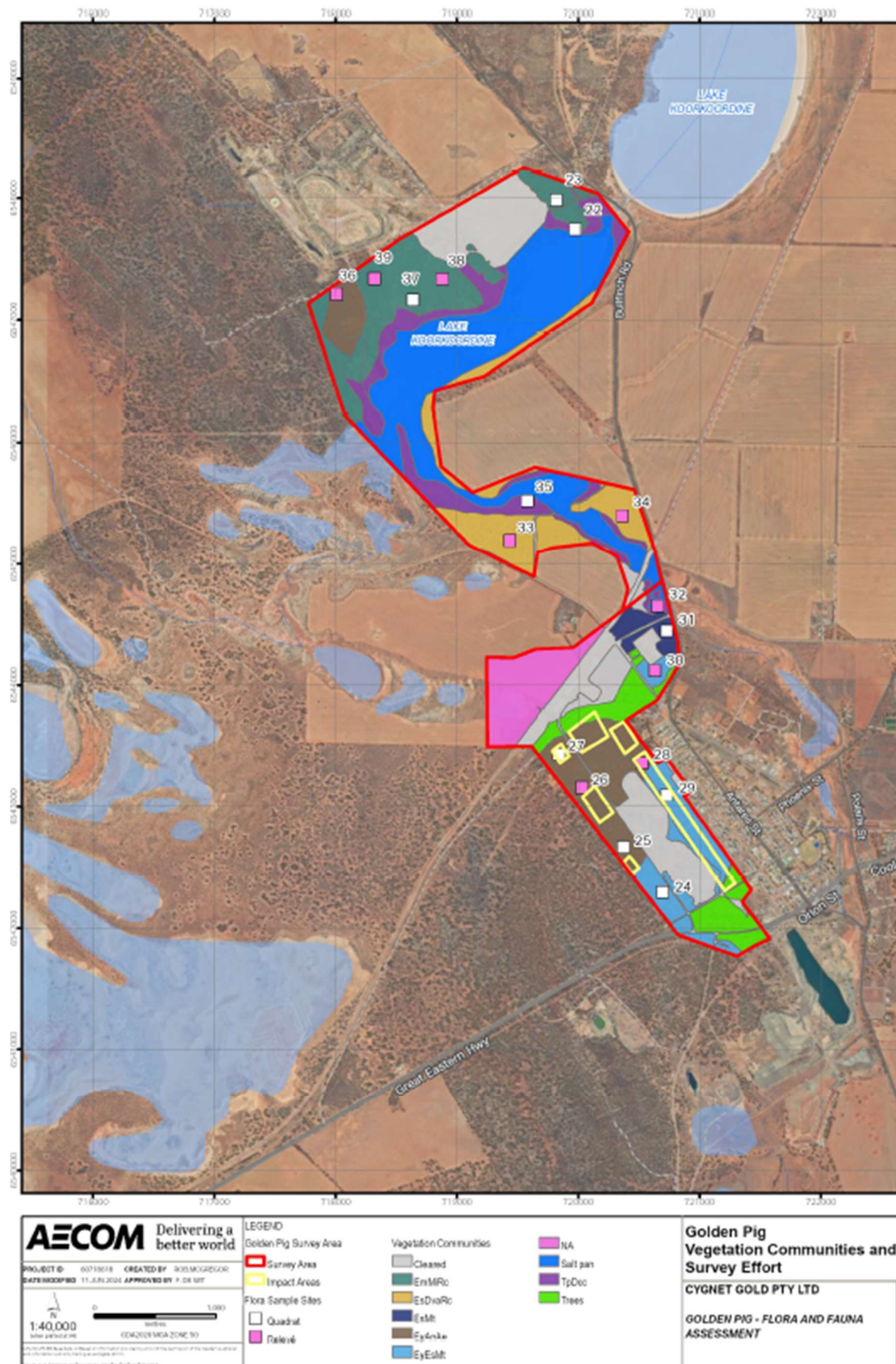


Figure 12: Vegetation communities mapped at golden Pig and Lake Koorkoordine

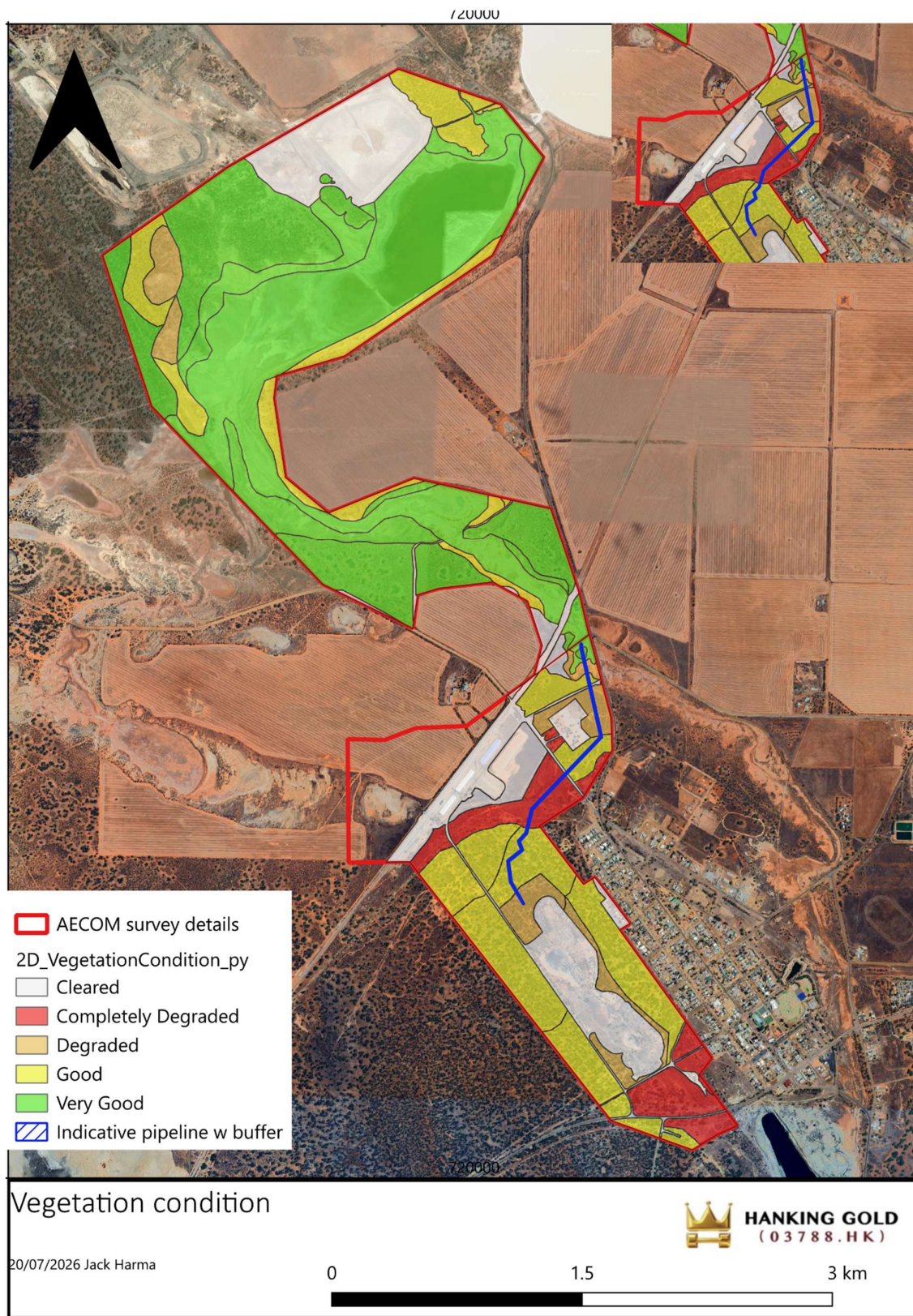


Figure 13: Vegetation condition within the survey area

5.5.3. PRE-EUROPEAN VEGETATION

Vegetation mapping of Western Australia was completed on a broad scale by Beard in 1975, classifying vegetation into broad vegetation associations. The proposed permit area is located entirely within the Yilgarn_1068 vegetation association. Vegetation associations retaining less than 30% of their pre-European extent generally experience accelerated species loss to an ecosystem level and are regarded as being vulnerable, while vegetation associations retaining less than 10% of their original extent are regarded as being endangered (EPA, 2000). The current extent of the Yilgarn 1068 vegetation association is above the 30% threshold across the four scales of assessment as seen below in table 4.

Table 4: Extent of pre-European vegetation associations remaining cross four scales for the proposed purpose permit area.

Vegetation Association	Description	Extent in the Proposed Permit Area (ha)	Scale	Pre-European Extent (ha)	Current Extent (ha)	Proportion Remaining (%)
Yilgarn_1068	Medium woodland; Salmon gum, Morrel, Gimlet and eucalyptus sheathiana	43.6	State-wide	268,900	142,088	53
			Coolgardie Bioregion	193,988	104,804	54
			Southern Cross subregion	193,988	104,804	54
			Shire of Yilgarn LGA	268,900	142,088	53

5.5.4. FLORA

A total of 93 native flora species were recorded from 28 families. The best represented families are Chenopodiaceae (18 species), Fabaceae (12 species) and Myrtaceae (ten species). AECOM noted that this number was moderate in comparison to both recent studies in the area, and the Dandjoo database. The reduced biodiversity reflects the disturbance onsite given its proximity to the Southern Cross townsite.

No species listed as Threatened under the EPBC Act or BC Act or listed as Priority by DBCA were recorded.

Four weed species were recorded. None of these are listed under the Biosecurity and Agriculture Management (BAM) Act or as a Weed of National Significance (WoNS).

5.5.5. FAUNA

No significant fauna species were observed, and no indirect evidence was recorded within the survey area. Based on the desktop assessment and the field survey, the following significant fauna species considered to have the potential to utilize the habitat within the survey area as both core and marginal habitats are listed below:

Potential core habitat for:

Chuditch (*Dasyurus geoffroii*) listed as EPBC and BC Act Vulnerable

Malleefowl (*Leipoa ocellata*) listed as EPBC and BC Act Vulnerable.

Potential marginal habitat for:

Common Greenshank (*Tringia nebularia*) listed as EPBA and BC Act

Tree-stem Trapdoor Spider (*Idiosoma castellum*) listed as DBCA Priority 4

No evidence of these species was recorded during the survey, including scats, Malleefowl mounds, and tracks.

5.5.6. FAUNA HABITAT

Six fauna habitats have been defined and mapped in Figure 14, and are described as follows:

- Eucalypt Woodland (186.02 ha, 25% of survey area)
- Mallee Woodland (86.59 ha, 12% of survey area)
- Low Shrubland (63.11 ha, 9% of survey area)
- Salt Pan (167.22 ha, 23% of survey area)
- Trees over cleared (40.35 ha, 6% of survey area)
- Cleared (133.67 ha, 18% of survey area).

Of the current indicative pipeline footprint, 0.985Ha could be considered potential suitable habitat (Eucalyptus Woodland) for the Chuditch and Malleefowl, although these species are more likely to use the Mallee woodland habitat (not within the Purpose Permit Boundary) for foraging and breeding. The Salt Pan and Low Shrubland habitat (0.214Ha of the indicative pipeline route) may potentially house The Common Greenshank which may use the fringing shoreline as habitat when wet. This species exhibits vagrant behaviour, and due to its migratory nature, the likelihood of utilization within the habitat is minimal.

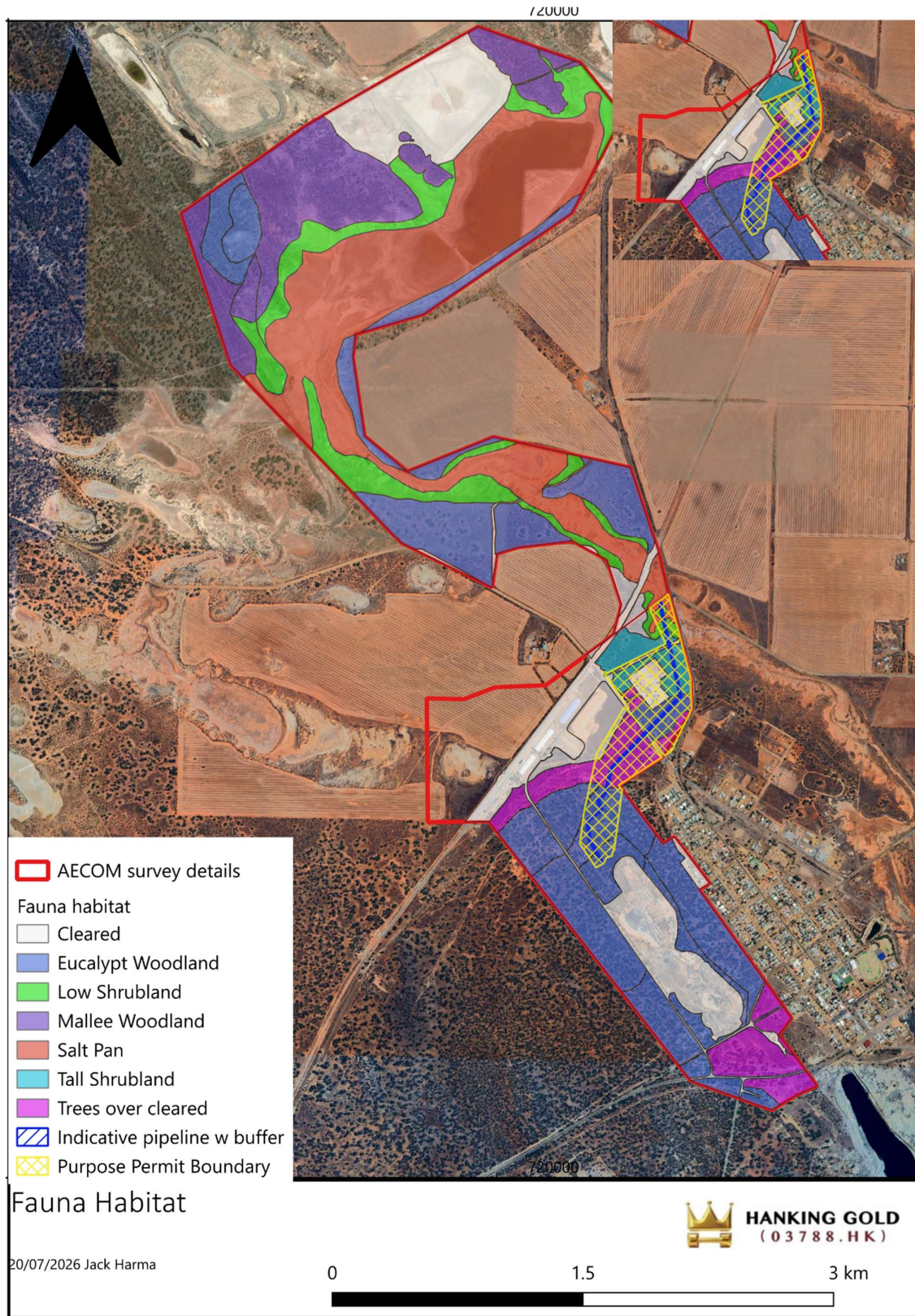


Figure 14: Mapped fauna habitats within the survey area

5.6. HERITAGE

5.6.1. ABORIGINAL HERITAGE

There is no Native Title Determination across the project area. There is one registered Native Title Claim over the project area being the Marlinyu Ghoorlie Claim (WC2017/007).

A search of the Aboriginal Cultural Heritage Inquiry System (ACHIS) was undertaken in July 2026 and confirmed there are no registered or lodged aboriginal sites within the purpose permit boundary.

5.6.2. EUROPEAN HERITAGE

A search of the INHERIT database was conducted in July 2026 for European heritage. Although there are numerous sites in an around Southern Cross with 116 sites within the Shire of Yilgarn, there are no sites located within the purpose permit boundary.

6. ASSESSMENT AGAINST THE 10 CLEARING PRINCIPLES

Based on the outcomes from the survey undertaken, an assessment of the survey results with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act, are provided below. This should be read in conjunction with the AECOM report in Appendix A.

6.1. PRINCIPLE A

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

Six native vegetation communities were recorded in the survey area which reflect the diversity of soils and landforms but didn't display high levels of biodiversity. Widely represented taxa are found within the broader surrounding region. Vegetation conditions from the pipeline footprint vary from completely degraded, to very good. No threatened or priority ecological communities or flora species were recorded in the survey area.

Assessment outcome: **The proposed clearing is unlikely to be at variance with this principle**

6.2. PRINCIPLE 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

The desktop study undertaken prior to the field study identified that there was a high likelihood of 4 fauna species of significance occurring in the survey area.

Chuditch – Currently restricted to south-west Western Australia, in areas dominated by sclerophyll forest or drier woodland, heath and mallee shrubland.

Malleefowl – Semi-arid to arid zone in shrublands and low woodlands dominated by mallee and associated habitats such as broombush and scrub pine.

Common Greenshank – Inland wetlands and sheltered coastal habitats. In shallows around the edges of water often among pneumatophores of mangroves or other sparse, emergent or fringing vegetation, such as sedges or saltmarsh.

Tree-stem Trapdoor Spider – Habitat is exclusive to the Avon Wheatbelt.

Six fauna habitats have been defined in the field survey. Of the current indicative pipeline footprint, 0.985Ha could be considered potential suitable habitat (Eucalyptus Woodland) for the Chuditch and Malleefowl, although these species are more likely to use the Mallee woodland habitat (not within the Purpose Permit Boundary) for foraging and breeding. The Salt Pan and Low Shrubland habitat (0.214Ha of the indicative pipeline route) may potentially house The Common Greenshank which may use the fringing shoreline as habitat when wet. This species exhibits a vagrant-like behaviour, and due to its migratory nature, the likelihood of utilization within the habitat is minimal.

From the field survey, no significant fauna species were observed, and no indirect evidence was recorded.

Assessment outcome: **The proposed clearing is unlikely to be at variance with this principle**

6.3. PRINCIPLE C

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

Field survey results yielded a total of 93 flora species recorded, representing 89 native species and four weed species.

A desktop study identified the high likelihood of two species of conservational significance to occur in the survey area.

Daviesia macrocarpa: Grows in alkaline red-brown clay loam with calcrete nodules on lower slopes, bases of hills with outcropping rock, on road verges, gravel pits and mine waste dumps.

Hakea pendens: Shrub, 2-3m high, 2.5-3.1m wide. Flowers pink-white, in September. Grows in stony loam on ironstone ridges.

No declared rare flora pursuant to the BC Act and EPBC Act were identified within the survey area during the field study.

Assessment outcome: **Clearing is not at variance with this principle**

6.4. PRINCIPLE 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 (TEC).

There are no known TECs located within the survey area. The closest TEC, Eucalypt Woodlands of the Western Australian Wheatbelt is approximately 2.6 km to the west and will not be impacted by the pipeline disturbance.

Assessment outcome: **Clearing is not at variance with this principle**

6.5. PRINCIPLE 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.

In accordance with Beard (1990), the survey area is located within the Coolgardie Botanical District of the Southwestern Interzone Province. One pre-European vegetation association is listed within the purpose permit boundary area. The vegetation association doesn't fall below the 30% threshold the EPA requires for retention as specified in the Statewide Vegetation Statistics (2018).

Assessment outcome: **Clearing is not at variance with this principle**

6.6. PRINCIPLE F

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

The purpose permit area occurs within the Lake Julia sub catchment of the wider Swan-Avon River catchment. A targeted desktop assessment has been undertaken to identify any watercourses, wetlands, or riparian vegetation within the proposed pipeline area. No permanent or semi-permanent wetlands are mapped or recorded within this area. No internationally or nationally significant wetlands are located within the survey area. The nearest nationally important wetland is Lake Cronin to the south some 135km within the Shire of Kondinin.

The Project is surrounded by cleared land used for agriculture, which has altered drainage in the area. Highly ephemeral surface water systems are found in and around the vicinity of the survey area, specifically

the Lake Polaris and Lake Koorkoordine catchments. The proposed pipeline disturbance area does partially fall within the drainage line with the final discharge point of the pipeline terminating here.

Assessment outcome: The proposed clearing may be at variance with this principle

6.7. PRINCIPLE G

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

The survey area and surrounding region has been extensively disturbed. Clearing within the survey area for the pipeline route is not considered likely to lead to further land degradation issues such as salinity, water logging or acidic soils.

Assessment outcome: The proposed clearing is unlikely to be at variance with this principle

6.8. PRINCIPLE 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 nearby conservation area.

There are no nature reserves within the survey area. An unnamed Nature Reserve sits adjacent to the north-eastern boundary of the survey area which is approximately 3 km north of the purpose permit boundary.

Assessment outcome: The proposed clearing is unlikely to be at variance with this principle

6.9. PRINCIPLE 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.

Direct disturbances for the pipeline route are not expected to cause deterioration in the quality of water on the surface or underground.

Assessment outcome: The proposed clearing is unlikely to be at variance with this principle

6.10. PRINCIPLE J

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

Rainfall in the Southern Cross subregion has an average annual rainfall of approximately 300mm and an evaporation rate of 2400 mm per annum. Clearing within the survey area is not likely to increase the incidence or intensity of flooding within the survey area or surrounds.

Assessment outcome: The proposed clearing is unlikely to be at variance with this principle

Hanking will implement the following mitigation measures in place to reduce the risks of the potential variance with the clearing principle (f).

- Pipeline Infrastructure will be placed to avoid the clearing of the riparian zone of clay pans and shallow lakes.
- Where infrastructure cannot be moved from the riparian zone of the drainage line, the clearing will be minimised, and water diversions will be created.

7. VEGETATION CLEARING

Vegetation disturbance will occur via raised blade clearing with a loader or I.T. Clearing areas will be kept to the minimum for the pipeline route. Existing disturbances will also be utilised where possible to minimise the amount of new clearing required. Consultation with the Shire of Yilgarn is ongoing with regards to the exact location of the pipeline withing the Purpose Permit Area.

5.2. METHOD OF VEGETATION CLEARING

Prior to clearing, a Hanking specific internal permit will be completed and signed off by the companies Environmental Manager (or delegate) to ensure clearing is being undertaken under a granted native vegetation clearing permit (subject of this application) Clearing methodology will also include the following practices:

- Clearing areas will be delineated in accordance with the project specific internal permit, the clearing boundary will be surveyed and demarcated with survey pegs and/or flagging tape;
- The internal permit will identify any conditions that apply to the clearing area (including any protected areas / species to be avoided where practicable);
- Clearing will not be undertaken until construction is imminent, minimising erosion and dust risks;
- Vegetated areas within the pipeline footprint will be stripped and stored to the side disturbed for use in later rehabilitation works;

8. ENVIRONMENTAL MANAGEMENT

8.1. WEED MANAGEMENT

Hanking aim to prevent the introduction of weeds and limit the spread of weeds in the proposed Purpose Permit Area as far as practicable. The following management measures may be implemented to minimise the risk of introducing flora into the proposed Purpose Permit Area:

- Weed, Seed and Hygiene Certificates will be requested and presented as verification prior to mobilisation of all equipment;
- All vehicles and equipment to be cleaned before mobilisation to the proposed Purpose Permit Area, to remove all dirt and vegetative materials;
- Off-road vehicle use will be strictly controlled with no driving permitted off designated roads/tracks; and
- Any new weed outbreaks will be recorded in the operation's Incident Reporting system and managed in accordance with site environmental procedures.

8.2. FAUNA MANAGEMENT

Hanking will aim to ensure fauna species are not adversely affected, via either direct impacts or impacts to habitat, as far as practicable. The following management measures will be implemented to minimise potential impacts on fauna:

- Pre-clearance inspections for Malleefowl nests will be conducted by the Environment Department within two weeks prior to clearing during the breeding season (September to January) to confirm no active nests are present;
- Awareness training will outline the appropriate behaviour and responses in the event of contact with native fauna
- Native fauna will not be captured, fed, harmed or disturbed. If relocation is required during the clearing process, the Environmental Manager (or delegate) will be contacted;
- All significant fauna deaths will be reported through the incident reporting system; and
- Open excavations will be monitored regularly to ensure that any trapped fauna are rescued and released as quickly as possible.

8.3. DUST DEPOSITION ON VEGETATION

Hanking will aim to minimise fugitive dust emissions and other air quality issues created during the pipeline clearing by:

- Using potable water to suppress dust emissions from unsealed roads and work areas as required;
- Where possible, operational activities will be scheduled to avoid high winds that may generate excessive dust; and
- Report any community complaints regarding dust emissions that are deemed excessive as an incident.

8.4. HYDROCARBON MANAGEMENT

Hanking will actively manage the storage and use of hydrocarbon in machinery and vehicles to minimise and contain spills and uncontrolled releases to prevent impacts to vegetation, soil and/or water. Increased vehicle activity during clearing may result in hydrocarbon spills; however, Hanking aims to minimise such occurrences by ensuring that:

- Hazardous materials are approved prior to site entry;
- Hydrocarbons and chemicals are safely stored; and
- Effective spill clean-up material is readily available at each work site and on all mobile service trucks or vehicles, and where hydrocarbons and chemicals are stored and / or used.

9. REFERENCES

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Appendix A: AECOM Flora and Fauna Assessment

Appendix B: Proof of Ownership

