

Targeted Fauna Survey

Proposed Working Area

Five Mile Creek Sand Project
(M 46/524)

Nullagine

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Version 1

On behalf of:

Drilline Civil and Haulage
c/- Newland Environmental Pty Ltd
PO Box 1027
Kalamunda WA 6926
E: charles@newlandenviro.com.au

Prepared by:

Zootopia Environmental Services
PO Box 755
BUNBURY WA 6231
M: 0402 141 197
E: gharewood@iinet.net.au

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1. INTRODUCTION

The following report details the results of a targeted fauna survey of a proposed working area within the Five Mile Creek Sand Project (Mining Lease 46/524) under investigation by Drilline Civil and Haulage (on behalf of the tenement holders). The Project area is situated about 7.5 kilometres east of Nullagine and is accessed via the Skull Springs Road. Mining Lease 46/524 has a total area of about 113 hectares (ha), with the proposed working area making up about 12.2 ha of this total (Figure 1).

The proposed works area will ultimately require clearing and it is anticipated that a clearing permit may be required from the Department of Mines, Industry Regulation and Safety (DMIRS). Based on previous experience in the wider area it is expected that if a clearing permit were to be granted the DMIRS would request that a targeted survey be undertaken for the presence of certain fauna species of conservation significance, in this case *Macrotis lagotis* (bilby) and/or *Dasyercus blythi* (brush-tailed mulgara).

In anticipation of this requirement the proponent has requested the targeted survey be undertaken in advance to allow for project planning to proceed and to facilitate approvals. The aim of the survey reported on here was to establish if either species were present within the proposed working area by way of searching for each species characteristic burrows (in addition to tracks, scats and other signs).

2. SCOPE OF WORKS

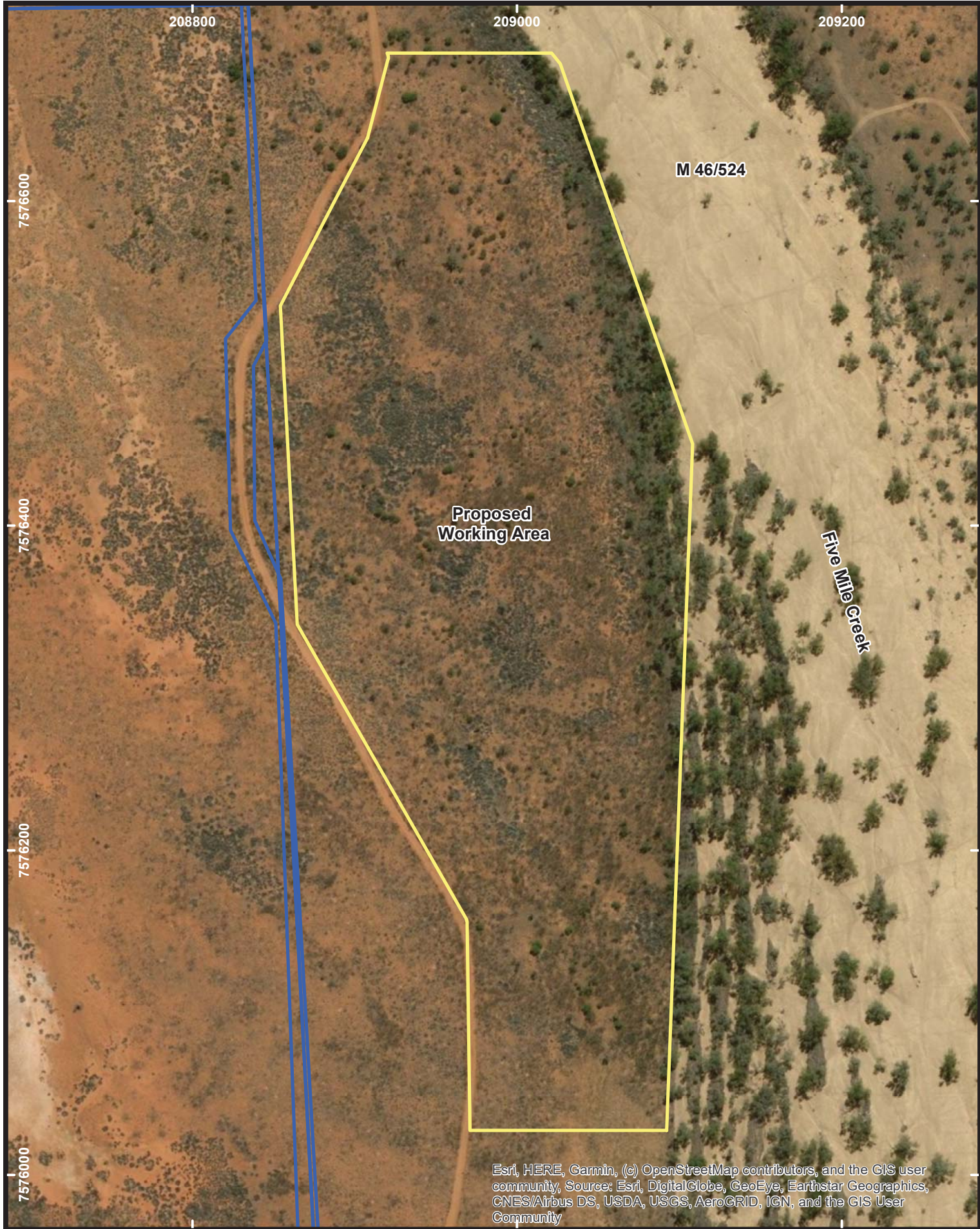
The scope of works has been formulated to comply with anticipated conditions that may be imposed by DMIRS if a clearing was applied for and granted, this being:

- The proposed working area shall be inspected by a *fauna specialist* for the presence of
 - i. *Macrotis lagotis* (Bilby) burrows; and
 - ii. *Dasyercus blythi* (Brush-tailed Mulgara) burrows.



3. METHODS

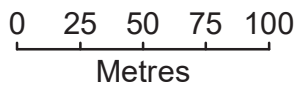
The propose working area was examined on foot by way 25 metre spaces parallel transects (Figure 2). The transects totalled about 7.6 km. Beside burrows other evidence searched for included diggings, tracks and scats of the respective species. The location of any observations was recorded with a handheld GPS.

Survey work was carried out on the 17 December 2020 by Greg Harewood (Zoologist – 18 years experience).



Legend

-  Tenement Boundary
-  Proposed Working Area



Drawn: G. Harewood

Date: Jan 2021

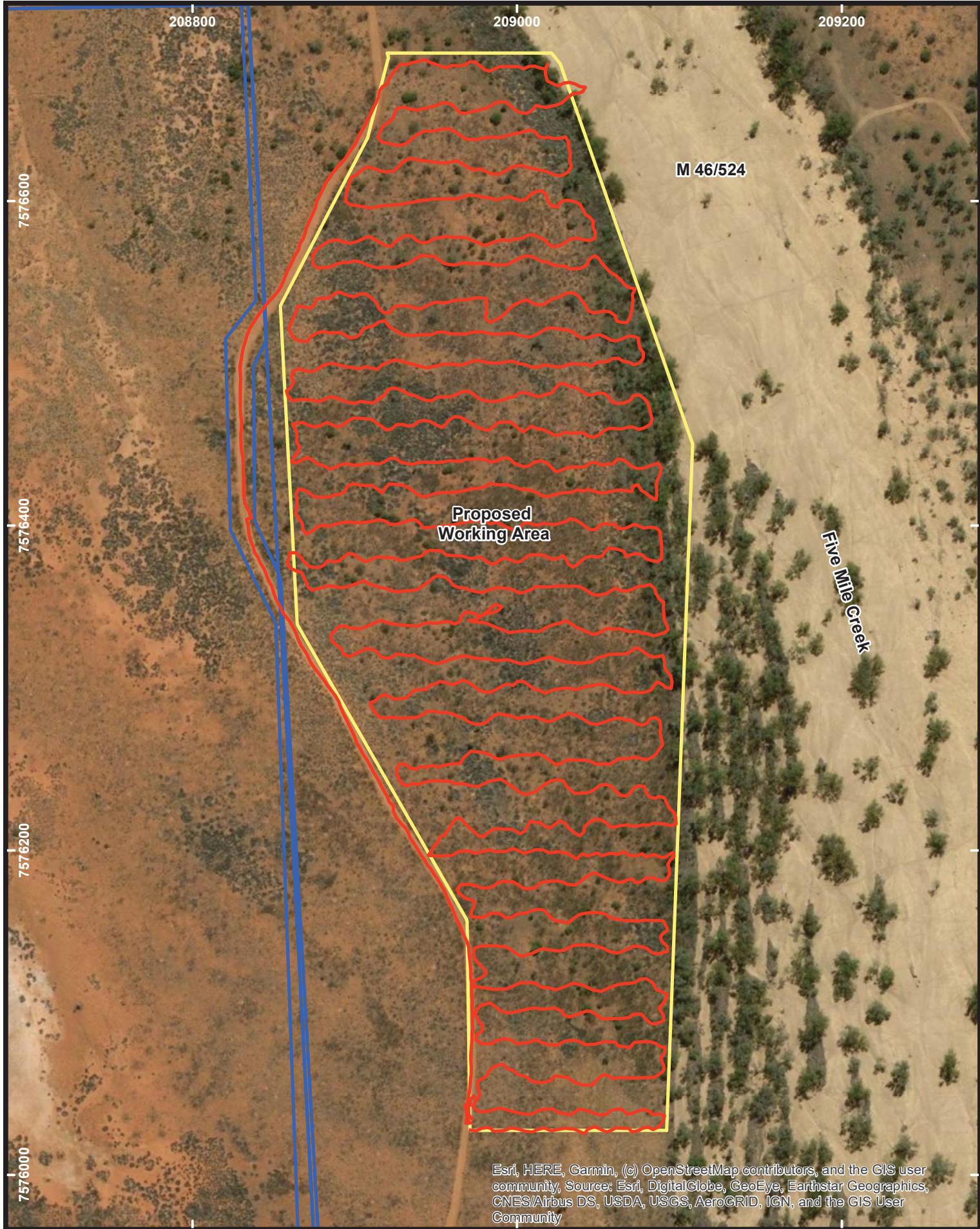
Scale: 1:3,000

**Five Mile Creek Sand Project
(M 46/524)
Nullagine**

**Survey Area
Aerial Photograph**




Projection/Coordinate System: UTM/MGA Zone 51

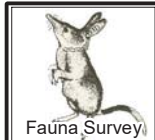
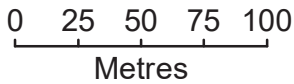
Figure: 1



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

-  Tenement Boundary
-  Proposed Working Area
-  Survey Transects



Drawn: G. Harewood
Date: Jan 2021
Scale: 1:3,000

**Five Mile Creek Sand Project
(M 46/524)
Nullagine**

**Survey Area
Completed Transects**

Projection/Coordinate System: UTM/MGA Zone 51



Figure: 2



4. RESULTS

Fauna habitats within the proposed working area were found to be mainly comprised of a shrubland/tall shrubland over a very open to open grassland (spinifex and/or hummock grassland) with occasional scattered small eucalypts (*Corymbia* spp.) on a sandy loam. Five Mile Creek is bordered by a woodland dominated by river gum (*Eucalyptus camaldulensis*).

Example images of the vegetation present are shown in Table 1.

Table 1: Example Images of the Fauna Habitats within the Proposed Working Area

Fauna Habitat Description	Example Image
<p>Open shrubland over an open grassland on sandy loam.</p>	
<p>Spinifex grassland with scattered shrubs on sandy loam.</p>	

Fauna Habitat Description	Example Image
<p>Tall shrubland over open grassland on sandy loam.</p>	
<p>Woodland over tall shrubland over grassland bordering Five Mile Creek.</p>	

No bilby or mulgara burrows, diggings, tracks or scats were identified during the survey. A small number of small burrows seen were attributed to skinks or varanids, based on their small entrance size and/or shape.

5. CONCLUSION

No evidence of either of the two target species was detected during the survey period. It is the Authors opinion that the level of survey is sufficient to draw that conclusion that neither the bilby or the brush-tailed mulgara are currently utilising the proposed working area.

Given that neither species appears likely to be present no specific fauna management recommendations relating to these species are required for implementation during the proposed site works.

DISCLAIMER

This fauna assessment report (“the report”) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Greg Harewood (“the Author”). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. In accordance with the scope of services, the Author has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also it should be recognised that site conditions, can change with time.

Within the limitations imposed by the scope of services, the field assessment and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

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