



Animal Species Compliance Statement

PROPOSED ARLINGTON MULTIPLE-USE DEVELOPMENT IN WALMER, GQEBERHA, EASTERN CAPE

Prepared for:

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1. Declaration of independence

I, Roy de Kock as duly authorized representative of BlueLeaf Environmental (Pty) Ltd, hereby confirm my independence (as well as that of BlueLeaf) as a specialist and declare that neither I nor BlueLeaf have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of which JG Africa was appointed as environmental assessment practitioner in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), other than fair remuneration for worked performed, specifically in connection with the Animal Species Assessment for the proposed Arlington development in Walmer, Gqeberha. I further declare that I am confident in the results of the studies undertaken and conclusions drawn because of it – as is described in this report.



Full Name: Roy de Kock

Title / Position: Faunal specialist

Qualification(s): BSc (Hons) Geology; MSc Botany; Candidate PhD Botany

Experience (years/ months): 17 years

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2. Expertise of specialist

Roy has over 17 years' experience in environmental consulting and specialist services in the Eastern Cape. Various projects throughout South Africa as well as Africa at large has also been undertaken. Projects include baseline studies, impact assessments and compliance auditing for various large-scale projects including numerous wind farms, roads (National and Provincial), and infrastructure development projects. Roy has also conducted numerous specialist studies including but not limited to Ecological and Botanical assessments, Biodiversity studies, Plant and Animal Search and Rescue, Fauna and Flora permits, Aquatic Assessments, Agricultural and Soil Assessments and Environmental and Venomous animals training workshops.

Roy holds a BSc Honours in Geology and an MSc in Botany from the Nelson Mandela University in Port Elizabeth. He is currently busy with his PhD (Doctorate degree) in Botany and Soil Science. Roy is registered as a professional natural scientist (Pri.Sci.Nat.) with SACNASP (Registration nr: 400216/16).

This study complies with the requirements as listed in the Gazetted protocols for the specialist assessment and minimum report content requirements for environmental impacts on animal species (GN. R 1150 of 2020).

3. Introduction

BlueLeaf Environmental (Pty) Ltd has been appointed by JG Africa to provide animal species input into the proposed Arlington multiple-use development on erven 3988, 4195, and 6991 along Glendore road in Walmer, Gqeberha, in the Nelson Mandela Bay Municipality, Eastern Cape (Figure 3.1).



Figure 3.1: Locality map showing the proposed project in Gqeberha, Eastern Cape

The Applicant intends to establish a multiple-use development, comprising of 25 clusters as well as an internal road network, on erven 3988, 4195 and 6991, along Glendore Road in Walmer. The consolidated development footprint will be 61,4 Ha in extent. Approximately 3 000 residential units are proposed which will be divided amongst nine (9) clusters designated for General Residential Zone 2 and General Residential Zone 4. In addition, 13 clusters designated for both Business Zone 1 and Business Zone 2 are planned, as well as one (1) cluster for Community Purposes and two (2) clusters for Special Purposes Infrastructure (solar power & wastewater treatment).

3.1 Permanent footprints

The development will include the following permanent components (Figure 3.2):

- Retail/Business Infrastructure.
- Office/Storage Facilities.
- Medical Use/Office Facilities.
- Special Use High Tech Industrial facility/infrastructure.
- Warehouse Facilities.
- Community Zone (i.e., child aftercare facilities).
- Mixed-residential Housing Units including Social Housing – approximately 3000 units are proposed.

- Club House and Sport Facilities.
- A Business Incubator / Substation Area.
- Parking/Solar Charging Stations.
- Special Purposes Infrastructure – solar photovoltaic power park & wastewater treatment plant.
- Open spaces.
- Installation of internal infrastructure services, such as water, sanitation, irrigation, stormwater, roads, and electricity, to service the proposed infrastructure. See further details below; and
- Installation of external infrastructure services, such as stormwater and sanitation connection lines as well as a pedestrian walkway along Racecourse Road and two traffic circles along Glendore Road. An additional road will be constructed between the south-western corner of the site and the northern circle.

3.2 Temporary footprints

Temporary footprint includes the areas directly affected/disturbed by construction and clearing of land that has taken place at the initial stages of construction but will be rehabilitated after completion of construction activities. The temporary footprint present on site is listed as follows:

1. Clearing of vegetation.
2. Laydown areas for materials and equipment.
3. Construction machinery.
4. Site camp.
5. Parking bays.

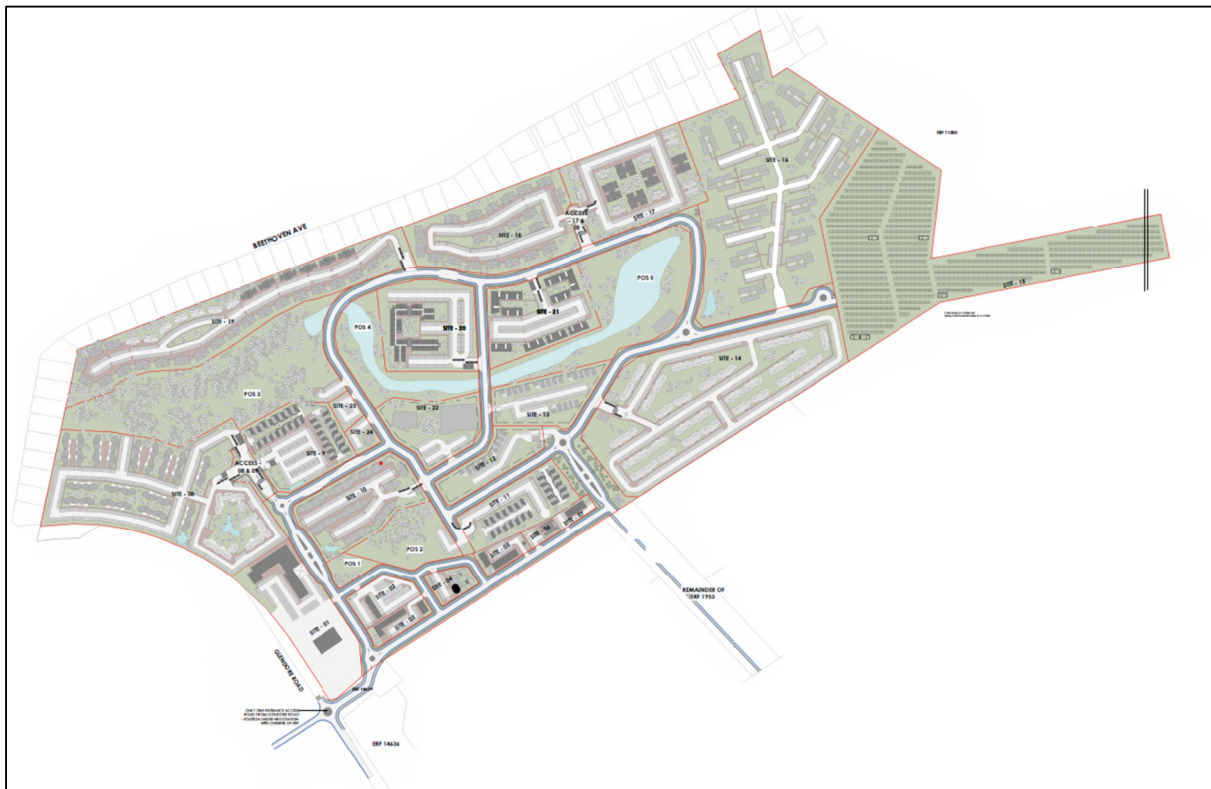


Figure 3.2: Layout map of the proposed development on erven 3988, 4195 and 6991 in Walmer.

3.3 Methodology

This report has been drafted in accordance with the Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in Terms of Sections 24(5)(a) and (h) and 44 of NEMA (G.NR. 1150 of 2020) – Protocol for the specialist assessment and minimum report content requirements for environmental impacts on animal species.

A site sensitivity verification was conducted (see Chapter 5 of this report) to confirm/dispute the current use of the land and animal sensitivity as identified by the Screening Tool. Motivation, with photographic evidence, were provided as part of the site sensitivity verification.

Current literature that was used to describe the site includes:

- SANBI (South African National Biodiversity Institute) Red List of South African Animals (<http://www.redlist.sanbi.org/>).
- SANBI National Vegetation Map (updated 2018).
- IUCN (International Union for Conservation of Nature) Red List of Threatened Species (<http://www.iucnredlist.org/>).
- CITES (Convention on International Trade in Endangered Species of Wild Flora and Fauna) (<http://www.cites.org/>).
- NEMBA Threatened or Protected Species Regulations (ToPS) (Notice 255 of 2015 of NEMBA).
- DFFE Screening Report.

3.4 Screening Report

The National Web based Environmental Screening Tool is a geographically based web-enabled application which allows a proponent intending to apply for environmental authorization in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity.

The Screening Tool also provides site specific EIA process and review information, for example, the Screening Tool may identify if an industrial development zone, minimum information requirement, Environmental Management Framework or bio-regional plan applies to a specific area. Some of these documents can then be accessed through the Screening Tool via links, for consideration during screening.

Further to this, the Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

Finally, the Screening Tool allows for the generating of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended whereby a Screening Report is required to accompany any application for Environmental Authorization and as such the tool has been developed in a manner that is user friendly and no specific software or specialized GIS skills are required to operate this system.

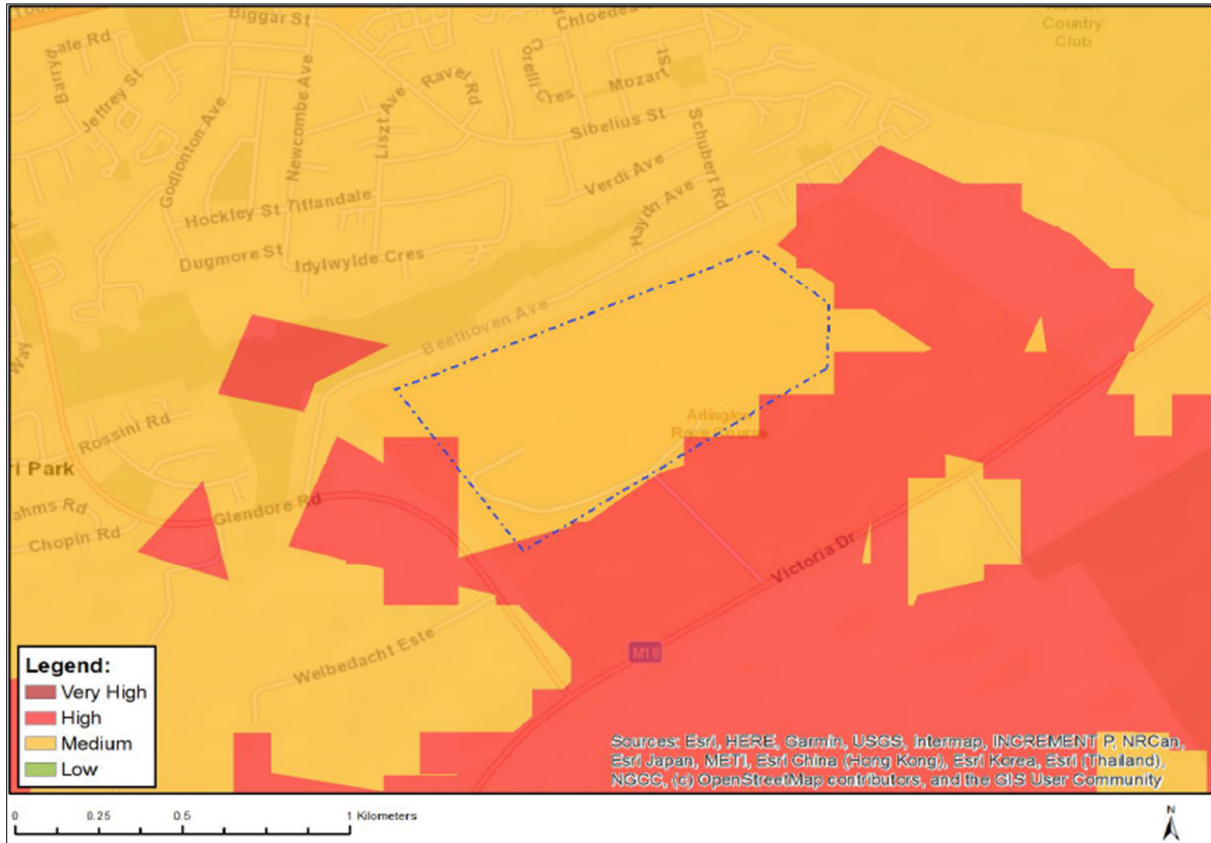


Figure 3.3: Animal species theme sensitivity of the site and surrounding areas (Screening Report)

The screening report classifies the agricultural theme for the entire study site as **high sensitive** based on numerous sensitive animal species which may occur on site. These include:

Sensitivity	Feature(s)
High	Aves-Circus ranivorus
High	Aves-Bradypterus sylvaticus
Medium	Invertebrate-Aneuryphymus montanus
Medium	Aves-Neotis denhami
Medium	Mammalia-Chlorotalpa duthieae
Medium	Sensitive species 7

Below is a desktop and site assessment to confirm/dispute the animal species theme sensitivity classification.

4. Desktop analysis

This section was completed prior to the site visit and consist of a desktop analysis of the site based on available literature, plans and legislation.

4.1 Land use

Current land use has been determined and the map in Figure 4.1 shows that the dominant land use for the development site is urban vegetation. The site visit confirmed that footprint consist of urban infrastructure, either building and other built features like walls, stands and roads with isolated patched of naturally wooded land.

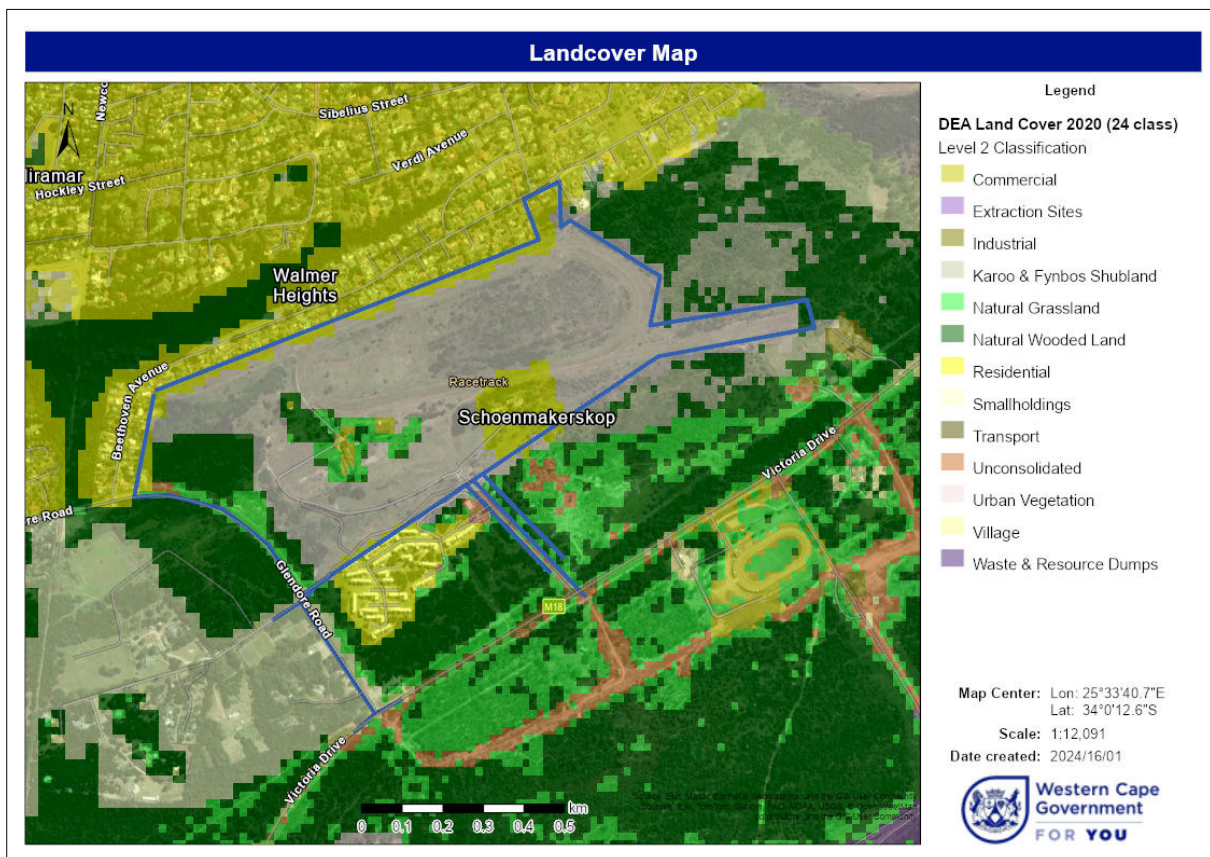


Figure 4.1: Land cover of the study site and surrounding area

The site was historically transformed to a horse racetrack. Arlington, previously St Andrews Racing Club, was opened in 1950 with the last race run in 2013. Since then, the land has been vacant with most of the infrastructure becoming decrepit since then and the racetrack itself overgrown with vegetation. No surface water features exist on site. Current land use for the entire site will change to urban development if the projects proceed.

4.2 Vegetation

According to the 2018 SANBI Vegetation map the site is covered by two vegetation types namely **Algoa Sandstone Fynbos** and **Sardinia Forest Thicket** (Figure 4.2).

Algoa Sandstone Fynbos occurs on moderately undulating plains and undulating hills supporting vegetation composed of low, medium dense graminoid, dense cupressoid-leaved shrubland, dominated by renosterbush. There are both grassland and shrubland forms of the renosteveld present, probably depending on grazing and fire regimes. Thicket patches are common on termitaria (heuweltjies are absent) and in fire-safe enclaves. Vegetation is dominated by *Aspalathus nivea* in the post-fire, early seral stages.



Figure 4.2: SANBI VegMap of the study site and surrounding areas

4.3 Topography

Topography refers to the form and structure of a landscape. The terrain is characterised by even topography with a slight slope from the north-east to the south-west towards a watercourse that drains into a dam at the southwestern corner of the site. The average gradient is $\pm 6\%$.

4.4 Biodiversity

According to the NMBM Bioregional Plan (2014) the site is not in any biodiversity sensitive area (Figure 4.3). No land management objectives are therefore required.

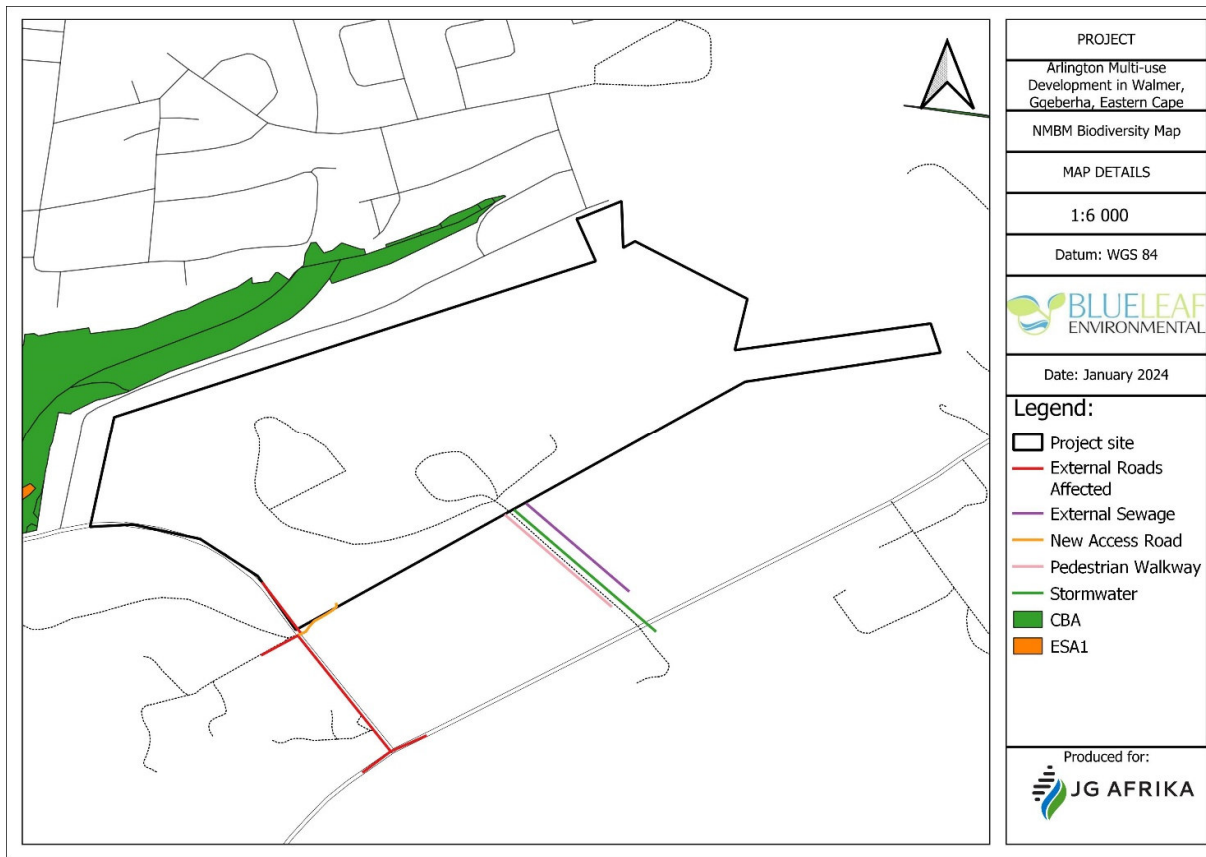


Figure 4.2: Nelson Mandela Bay CBA map of the study site and surrounding areas

4.5 Faunal habitats

Dense vegetation patches occur in various areas on site. The biggest is a forest/thicket patch consisting of dense trees and scrubs occurring in the western part of the site. It is suspected that this is the remnant of the original Sardinia Forest Thicket that used to occur on site before urban development cleared the site of endemic vegetation. Other, smaller dense vegetation patches occur throughout the site. all these areas provide habitat for both small to medium mammals, reptiles and snakes, birds, and a variety of insects. These sites must undergo Search and Rescue by a qualified faunal specialist prior to commencement of any vegetation clearing.

4.6 Animal species

No animal species of conservation concern (this include species identified in the Screening Tool) were observed on site. However, this does not mean that they do not occur on site. Potentially suitable habitats do exist, especially for birds so a low risk of animals to be present do exist.



Mammals:

No mammals, other than cattle, were observed but it is assumed that small mammals like mice, rats, shrews and genets may exist. Habitats are large enough to potentially shelter small antelope like Duiker and others.

Duthies Golden Mole (*Chlorotalpa duthieae*), a sensitive species listed in the Screening Tool Report may occur. Its natural habitats are subtropical or tropical moist lowland forests, moist savanna, temperate grassland, arable land, pastureland, plantations, rural gardens, and urban areas. The mole digs an underground nest under the base of a tree and creates shallow passages radiating out into the surrounding area. It forages, mainly at night, in these tunnels and in the leaf litter, feeding mainly on earthworms. Little is known of the animal's breeding habits. On site, it is anticipated they will be found in the dense thicket forest patches and in the thornveld by the old racetrack (Figure 4.3).



Figure 4.3: Three high probability habitats for Duthie’s Golden Mole

Common duiker*	Duthies Golden Mole*	Cattle:
		











* Photo example from iNaturalist

Birds:

Birds are common in the area. With no surface water features found on site, species diversity is lower than expected for such a large area and species like the African Marsh Harrier (*Circus ranivorus*), another species listed in the Screening Tool Report are not common on site. Habitats for the Knysna warbler (*Bradypterus sylvaticus*) are found on site. They are found in dense tangled scrub

of forest edges, on or relatively near the coast. The Denham's bustard (*Neotis denhami*) occupies grassland habitats. They are mainly distributed in savanna and may be found at any elevation up to 3,000 m. They can be found in a considerable range of secondary habitats including dense shrubland, light woodland, farmland, dried marsh, and arid plains. Bird species observed during the site visit includes:

- Grey heron (*Ardea cinerea*)
- Cattle egret (*Bulbulcus ibis*)
- Hadeda (*Hadeda ibis*)
- Egyptian goose (*Alopochen aegyptiaca*)
- Helmeted guineafowl (*Agelastes meleagrides*)
- Common quail (*Coturnix coturnix*)
- Laughing dove (*Spilopelia senegalensis*)

Grey heron	Knysna warbler*	African Marsh Harrier*	Cattle egret	Hadeda	Egyptian goose*
					
Helmeted guineafowl	Common quail	Laughing dove	Denham bustard*		
					

* Photo example from iNaturalist

Reptiles and amphibians:

Reptiles are common in the Eastern Cape and most reptiles, and all frogs are protected in the Eastern Cape. Most frogs and reptile species merely require removal permits from DEDEAT. These removal permits are not necessary required for the project and should only be applied for if any species required relocation out of the construction footprint during construction phase. Some common reptiles in the area include:

Cape cobra	Puffadder	Rinkhals	Mole snake	Boomslang
				

Tropical house gecko	Cape skink	Cape Dwarf Chameleon	Angulate tortoise	Leopard tortoise
				

Invertebrates:

No scorpions or large spiders were identified on site. All scorpions as well as Baboon Spiders are however indicator species and must be relocated if observed or found on site. The Yellow-winged Agile Grasshopper (*Aneuryphymus montanus*), listed in the Screening Tool Report, is endemic to the Cape region of South Africa and is known from only 6 localities. The species is associated with fynbos vegetation, where it has been collected "amongst partly burnt stands of evergreen Sclerophyll in rocky foothills" (Brown 1960). It prefers south-facing cool slopes (Kinvig 2005).

Aneuryphymus montanus:



4.7 Photographs

The following photographs were taken of significant features that will assist in confirming/disputing the DFFE Screening Tool’s classification for the animal them on site:

Dense thicket forest patch in the western section of the site is a high potential habitat for various species:	
	

Various existing urban infrastructure exist. These are good habitats for various snake species:



The area in and around the racing track is also good habitat for various species:



5. Site sensitivity verification

A site visit was conducted on the 8th of March 2022, and the entire site as shown in Figure 3.2 was assessed. The following was found:

- The site is covered by grassland, thornveld, savanna and dens thicket patches interspersed with scatters infrastructure like buildings, stands, stores, etc. from when it was used as an equestrian racetrack. No fynbos exists.
- Habitats exist for various animal species, especially the dense thicket patches and the open vegetated areas where the racetrack used to be.
- Old buildings, rubble and other infrastructure are good habitats for various reptile species, especially snakes, lizards, and geckos.
- No surface water exists on site.
- No animal species of conservation concern were found on site. The risk of finding any is considered as low.

Based on the above, it is the opinion of the specialist that the land contained within the proposed study site is considered as **low sensitivity with zones of medium sensitivity** for the animal species theme. A full Animal Species Assessment is therefore NOT required. The proposed development may therefore proceed provided that the following mitigations are included into the EMPr:

1. A site representative must be trained in handling dangerous reptiles and scorpions during site construction. This person must inspect the construction site daily before activities start and relocate any snakes, spiders and scorpions if found in holes, trenches, plant, building, or office structures.
2. Animal Search and Rescue (S&R) of the entire site must be done by a qualified faunal specialist prior to commencement of any activity on site. All old buildings must be searched, and animals found must be relocated.

6. Reference

Acocks, J.P.H. 1953, 1988. Veld types of South Africa. Memoir of the Botanical Survey of South Africa 57: 1-146.

Coates-Palgrave, K & Coates-Palgrave, M. 2003. Trees of southern Africa. 3rd edition. Struik, Cape Town.

Driver, M., Raimondo, D., Maze, K., Pfab, M.F. And Helme, N.A. 2009. Applications Of The Red List For Conservation Practitioners. In: D. Raimondo, L. Von Staden, W. Foden, J.E. Victor, N.A. Helme, R.C. Turner, D.A. Kamundi And P.A. Manyama (Eds). Red List of South African Plants. Strelitzia 25:41-52. South African National Biodiversity Institute, Pretoria.

Food And Agricultural Organization's (FAO) (2006) Guidelines of Soil Description. 4th Ed.

Germishuizen, G. & Meyer, N.L. (Eds). 2003. Plants of southern Africa: an annotated checklist. Strelitzia 14. NBI, Pretoria.

Illenberger, W.K., 1992. Lithostratigraphy of the Schelm Hoek formation (Algoa group). Lithostratigraphic series.

IUCN. 2012. Red List of Threatened Species. IUCN Species Survival Commission, Cambridge Available: <http://www.iucnredlist.org/> (Accessed 03/03/2017).

Low, A & Rebelo, A. 1998. Vegetation of South Africa, Lesotho and Swaziland. Department of Environmental Affairs & Tourism, Pretoria.

Mucina, L. & Rutherford, M.C. 2012. The vegetation of South Africa, Lesotho and Swaziland. SANBI, Pretoria.

NEM:BA. 2014. National Environmental Management Act: Biodiversity Act (No. 10 of 2004) – Alien and Invasive Species lists, 2014. Government Gazette, No. 37320, 12 February 2014.

Roberts, D. L., Botha, G. A., Maud, R. R., Pether, J., And Johnson, M. R. 2006. Coastal cenozoic deposits. The geology of South Africa. Johannesburg/Pretoria: Geological Society of South Africa/Council for Geoscience, 605-628.

Schoeman, J.L., Van Der Walt, M., Monnik, K.A., Thackrah, A., Malherbe, J. And Le Roux, R.E., 2000. The development and application of a land capability classification system for South Africa. ARC-ISCW Report No GW/A/2000/57, ARC-Institute for Soil, Climate and Water, Pretoria

Smith, B. 2006. The Farming Handbook. Netherlands & South Africa: University of KwaZulu-Natal Press & CTA.

Soil Classification Working Group. 2018. Soil Classification: A Natural and Anthropogenic System for South Africa, ARC-Institute for Soil, Climate and Water, Pretoria