Proposed Truck Stop and Associated Infrastructure Development on Erf 56 and Erf 57, Mossdustria, Mossel Bay Local Municipality, Western Cape

Terrestrial Animal Species Compliance Statement

Compiled for





By



April 2023

REPORT PRODUCTION

Specialist	Role	Project Component	Qualifications and Professional Registration
Robyn Phillips	Terrestrial Ecologist	Ecological assessment of terrestrial fauna; Field work and report compilation	MSc (Zoology) UNP
			SACNASP: Pr.Sci.Nat.
			Reg. no.: 400401/12
			Fields: Zoological and Ecological
			Years' Experience: 21, primary expertise
			in fauna and terrestrial biodiversity

Refer to Appendix A for an abridged CV of the specialist.

CONTACT INFORMATION

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SPECIALIST DECLARATION OF INDEPENDENCE

I, Robyn Phillips, in my capacity as a specialist consultant, hereby declare that I -

- Act as an independent consultant;
- Do not have any financial interest in the undertaking of the activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- Do not have and will not have vested interest in the proposed activity proceeding;
- Have no, and will not engage in, conflicting interests in the undertaking of the activity;
- Undertake to disclose, to the Competent Authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998);
- Will provide the Competent Authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not;
- As a registered member of the South African Council for Natural Scientific Professions, will undertake my profession in accordance with the Code of Conduct of the Council, as well as any other societies to which I am a member;
- Based on information provided to me by the project proponent and in addition to information obtained during the course of this study, have presented the results and conclusion within the associated document to the best of my professional ability;
- Reserve the right to modify aspects pertaining to the present investigation should additional information become available through ongoing research and/or further work in this field; and
- Undertake to have my work peer reviewed on a regular basis by a competent specialist in the field of study for which I am registered.

Robyn Phillips Pr.Sei.Nat. Terrestrial Ecologist SACNASP Reg. No. 400401/12

09 May 2023

Date

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ABBREVIATIONS

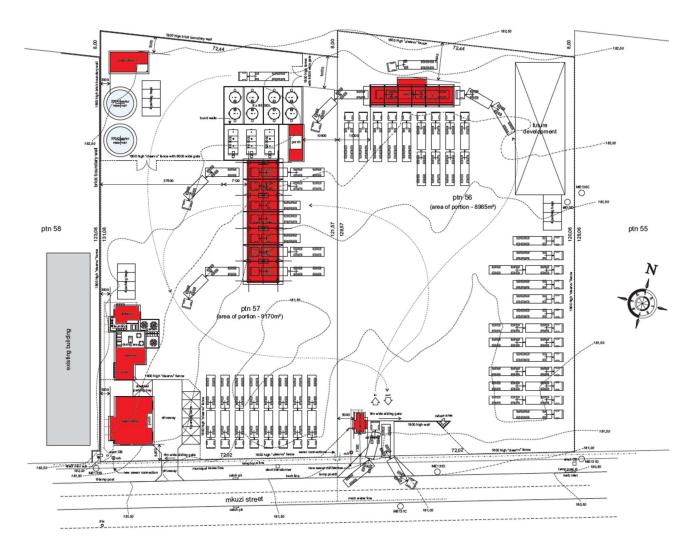
BA	Basic Assessment
CBA	Critical Biodiversity Area
DFA	-
	Department of Environmental Affairs
DFFE	Department of Forestry, Fisheries and the Environment
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EN	Endangered
ESA	Ecological Support Area
GIS	Geographic Information System
GN	General Notice
IAP	Invasive Alien Plants
IBA	Important Bird Area
IUCN	International Union for the Conservation of Nature
NEMA	National Environmental Management Act (Act 107 of 1998)
ONA	Other Natural Area
PA	Protected Area
QDGC	Quarter Degree Grid Cell
SANBI	South African National Biodiversity Institute
SACAD	South African Conservation Areas Database
SAPAD	South African Protected Areas Database
SCC	Species of Conservation Concern
VU	Vulnerable

1. INTRODUCTION

Sharples Environmental Services cc (SES) has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the environmental process for the Application for Environmental Authorisation (EA) in terms of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998) and the 2014 Environmental Impact Assessment (EIA) Regulations of 2014, as amended (GNR 326 of 2017) for the Proposed Filling Station and Truck Stop development located on Erven 56 and 57, Mossdustria, Mossel Bay Local Municipality, in the Garden Route District, Western Cape. As part of the environmental process, the National Web-Based Environmental Screening Tool developed by the Department of Forestry, Fisheries and the Environment (DFFE), identified the need for a Terrestrial Animal Species Assessment or Compliance Statement for the proposed project. Cossypha Ecological was appointed to undertake the specialist study for the site in question.

2. PROJECT DESCRIPTION

The applicant proposes to construct a filling station and truck stop on a site of ~1.8 ha in the industrial area known as Mossdustira, in Mossel Bay. The proposed layout is shown in **Figure 1**.



ptn 4



3. THE STUDY AREA

3.1 LOCATION

The site is located in the industrial precinct known as Mossdustria approximately 10 km due west of the town of Mossel Bay, within the Mossel Bay Local Municipality, Garden Route District, Western Cape Province (**Figure 2**). The site falls within Quarter Degree Grid Cell (QDGC) 3422AA and lies between 34°09'38.25" and 34°09'43.38" south and 22°00'15.46" and 22°00'22.17" east. The site is flat and lies at an altitude of ~180 m above mean sea level (a.m.s.l). The assessment area is approximately 1.8 ha in extent.



Figure 2: Locality of the study area

3.2 LAND USES OF THE SITE AND SURROUNDING AREAS

The site is currently a vacant piece of land situated in the industrial precinct of Mossdustria in Mossel Bay and is surrounded by industrial land uses such as warehousing and logistics. Mostly disturbed and degraded vegetation surrounds the Mossdustria precinct, with a small drainage line occurring at the south-eastern corner and draining away from the precinct in a south-easterly direction. The Petro SA fuel refinery is situated 1 km to the west of the Truck Stop site, and the Eskom Gourikwa Power Station and Gourikwa Landfill site are situated a further ~2 km to the west. The Mossel Bay Airport occurs ~3.5 km to the east. The remaining surrounding areas are rural in nature and comprised mostly of farmlands with cultivated fields or pastures. The regional road R327 is routed adjacent to the Mossdustria precinct on the east side and the N2 highway occurs ~1.75 km to the south. The coastline occurs ~5 km to the south (**Figure 3**).

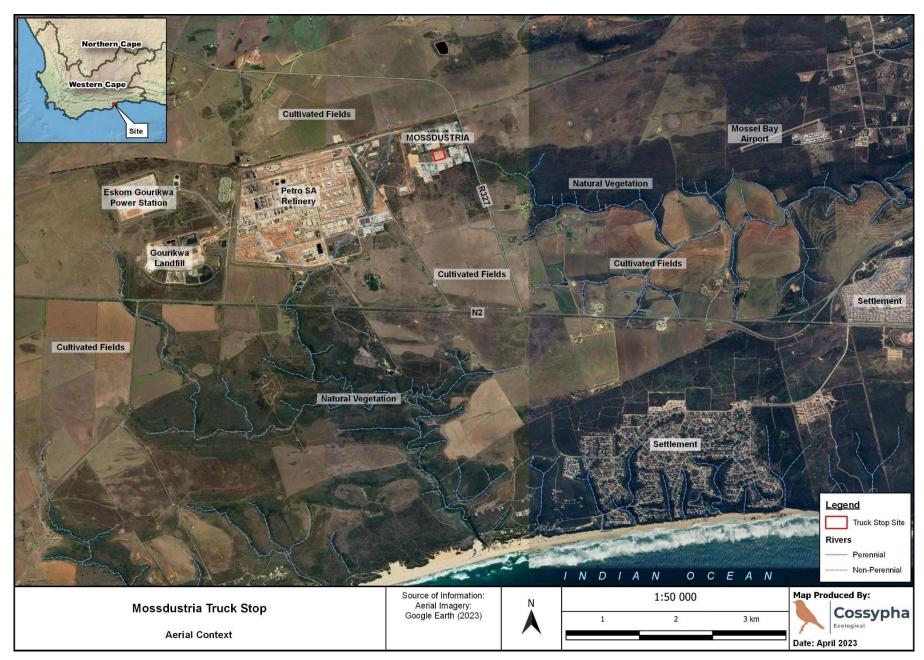


Figure 3: Aerial overview of the study area and surrounds

4. **REPORTING REQUIREMENTS**

A Screening Report for proposed site environmental sensitivity, as required by the EIA Regulations of 2014 (as amended in 2017) for an EA in terms of NEMA (Act 107 of 1998), was generated for the project using the National Web-Based Environmental Screening Tool on the 19th of October 2022. The report identified the majority of the site as having **High** sensitivity for the Animal Species theme due the potential occurrence of the following species of conservation concern (SCC):

- Aves: African Marsh Harrier Circus ranivorus (EN)
- Aves: Black Harrier Circus maurus (EN)
- Aves: Martial Eagle Polemaetus bellicosus (EN)
- Aves: Denham's Bustard *Neotis denhami* (VU)

The report also identified **Medium** sensitivity for a tiny corner of the site due to the potential occurrence of the following SCC:

- Aves: Knysna Warbler Bradypterus sylvaticus (Vulnerable (VU))
- Aves: Southern Black Korhaan Afrotis afra (VU)
- Sensitive Species 8¹ (VU sensitive mammal)
- Invertebrate: Yellow-winged Agile Grasshopper Aneuryphymus montanus (VU)

Therefore, a terrestrial faunal assessment is required for the project, which must be compiled in accordance with the requirements of the *Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes when Applying for EA* (GN R320 of 2020) and comply with the following gazetted protocol. This protocol replaces the requirements of Appendix 6 of the EIA Regulations, 2014 (as amended) in terms of NEMA:

• Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal Species, published in GN 1150 of 30 October 2020.

4.1 SITE SENSITIVITY VERIFICATION

According to the above-mentioned protocol, the current use of the land and the potential environmental sensitivity identified by the screening tool, of the site under consideration, must be confirmed by undertaking a site sensitivity verification prior to commencing with the specialist assessment. This will confirm the actual use of the land on the ground versus that which has been identified by the screening tool and the validity of the sensitivity rating assigned by the screening tool. This will confirm whether a full Specialist Assessment Report (applicable for **Very High** and **High** sensitivity sites) or a Compliance Statement (applicable for **Low** sensitivity sites) is required.

In the case of species assessments, because **Medium** sensitivity data represents suspected habitat for SCC based on occurrence records for these species collected prior to 2002 or is based on habitat suitability modelling, the presence or likely presence of the SCC identified by the screening tool must be investigated through a site inspection. Where SCC are found on the site or have been confirmed to be likely present by the specialist, a **Terrestrial Animal Species Specialist Assessment** must be compiled in accordance with the requirements specified for **Very High** and **High** sensitivity in the protocol. Where no SCC are found on the site

¹ A SCC that is sensitive to the illegal harvesting trade. The actual name of the sensitive species may not appear in the final EIA report or in any of the specialist reports released into the public domain.

or the presence is confirmed to be unlikely during the site inspection, a **Terrestrial Animal Species Compliance Statement** must be submitted.

For the site in question, a field inspection took place on the 3rd of April 2023 where the site was inspected on foot. The season was late summer / early autumn and was deemed the appropriate time of year for the field survey. The site inspection revealed that the assessment area was in a modified state and comprised little to no vegetation. No animal SCC were observed on the site. This confirmed the ecological sensitivity for terrestrial fauna to be **Low** (see further explanation in **Sections 6.2** and **7**).

The following Report therefore comprises an investigation of the terrestrial fauna on the site in the form of a Compliance Statement in accordance with the Protocols for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal and Terrestrial Plant Species (GN 1150 of 2020) and written following the Species Environmental Assessment Guidelines for the implementation of the Terrestrial Flauna and Terrestrial Flora Species Protocols (SANBI, 2020).

4.2 TERMS OF REFERENCE

The terms of reference for the assessment were as follows:

- Undertake a desktop assessment and field survey of the site to inform the assessment;
- Verify the site sensitivity for terrestrial animal species;
- Determine the presence or likely presence of animal SCC;
- If any SCC are recorded, include evidence if possible, such as location and map points of where species are identified denoting them as high sensitivity areas within the site;
- Photographic record of the site characteristics, including potential habitats and/or sensitive areas;
- Compilation of a Terrestrial Animal Species Assessment or Compliance Statement following the Species Environmental Assessment Guidelines (SANBI, 2020), including a description of the baseline terrestrial biodiversity of the area; and
- Recommend impact management actions or any monitoring requirements for inclusion in the EMPr.

5. METHODOLOGY

The approach included a desktop assessment as well as a site visit. The methodology broadly entailed the following:

5.1 DESKTOP ASSESSMENT

The desktop assessment entailed the following:

- Review of available GIS layers relating to biodiversity conservation planning e.g. vegetation types, threatened ecosystems, relevant provincial spatial conservation or biodiversity plan, Important Bird Areas (IBAs), South African Protected Areas Database (SAPAD) etc.;
- Review of all relevant literature including distribution data of fauna expected to occur on the site, as well as the conservation status of species; and

• Review of historical satellite imagery obtained from Google Earth © to ascertain historical land use of the study area.

5.2 FIELD SURVEY

The field investigation was undertaken on the 3rd of April 2023 when terrestrial faunal elements within the study area were assessed. A daytime survey was conducted on foot by meandering through the assessment area. Changes in land cover, habitat, and vegetation were observed and any fauna or evidence of fauna present on site noted. Photographs were taken at a series of sample points to illustrate the condition of vegetation, habitat, and representative areas of the site (see **Figure 4**). A total of nine sample points were photographed and are described in the results section below. Coverage of the study area (one sample every 66 m) was deemed to be sufficient.

During the field survey the following aspects pertaining to terrestrial fauna were assessed:

- Current land use of the site and immediate surrounds;
- Current ecological state of habitats on site;
- Presence of terrestrial faunal SCC, protected species, or suitable habitat for such species on site; and
- Significant landscape features, ecological corridors, and landscape connectivity.

5.3 ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations pertain to the current study:

- It is assumed that all third-party information used (e.g. GIS data and satellite imagery) was correct at the time of generating this report.
- The survey was restricted to a single day-time site visit conducted over one day during one season (late summer / early autumn) and it is not considered necessary to perform an additional survey.
- The survey was conducted over approximately two hours in total.
- Findings, recommendations, and conclusions provided in this report are based on the author's best scientific and professional knowledge as well as information available at the time of compilation.

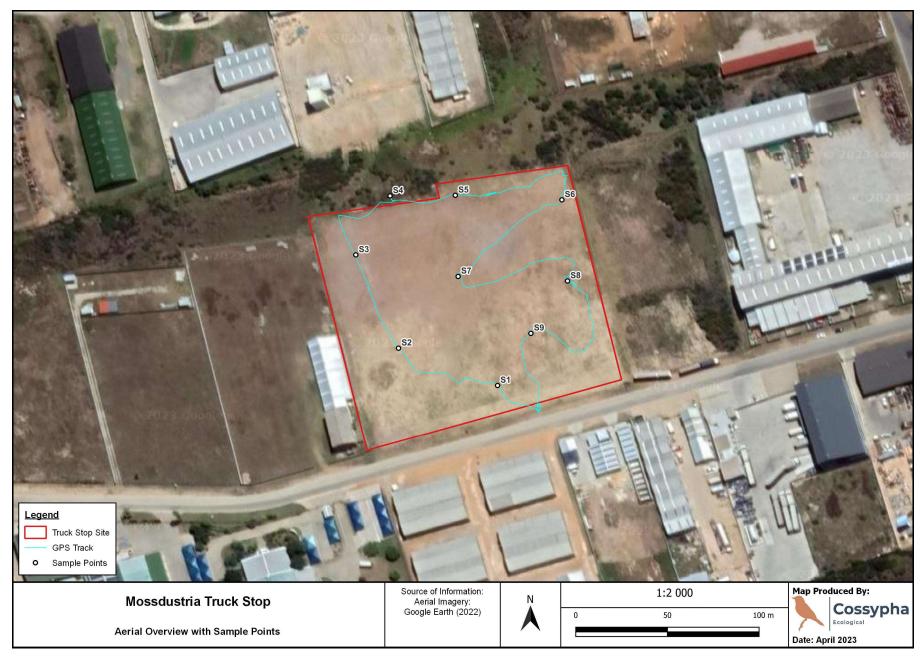


Figure 4: Aerial view of the site with GPS track and location of sample points

6. DESKTOP ASSESSMENT RESULTS

6.1 REGIONAL BIODIVERSITY PLANS

6.1.1 REGIONAL VEGETATION AND ECOSYSTEMS

The study area is located within the Fynbos Biome, within the Southern Fynbos Bioregion (Rutherford and Westfall, 1994). The site falls within the North Langeberg Sandstone Fynbos vegetation type (Mucina and Rutherford, 2006; 2018), which is currently listed as a Least Threatened ecosystem at both a national level (SANBI, 2021; DFFE, 2022) and in the Western Cape (Pool-Stanvliet *et al.*, 2017).

North Langeberg Sandstone Fynbos is distributed in the Western Cape Province from the northern slopes of the Langeberg near Worcester, and from Albertinia to Mossel Bay, at a broad altitudinal range of 100–1 800 m a.m.s.l. The vegetation occurs on gentle to steep, north-facing slopes, and consists mainly of proteoid and restioid fynbos, with ericaceous fynbos at higher altitudes, and asteraceous fynbos on the lower slopes. Ravines support thicket vegetation (Mucina and Rutherford, 2006).

6.1.2 FAUNA

From a faunal perspective, species that are likely to inhabit the ecosystem comprise typical coastal fynbos and thicket species. This may include birds such as spurfowl, robins, apalis, flycatchers, bulbuls, boubou, sunbirds, warblers, and raptors such as buzzards and falcons. Mammals may include mongoose, genet, duiker, bushbuck, and many small mammals such as thicket rats and grass mice. Reptiles may include tortoises, chameleons, lizards and skinks, adders, and other snakes. In addition, many invertebrates and insect pollinators inhabit the ecosystem.

6.1.3 WESTERN CAPE BIODIVERSITY SECTOR PLAN

According to the Western Cape Biodiversity Sector Plan (WCBSP; Pool-Stanvliet *et al.*, 2017), approximately half the site is classified as Critical Biodiversity Area (CBA) 1 Terrestrial, and the other half classified as Other Natural Area (ONA), with a few small areas not assigned to any biodiversity category (**Figure 5**). Considering the disturbed and modified nature of the site, little to no indigenous vegetation is present and the CBA will therefore not be affected by the proposed development.

6.1.4 PROTECTED AREAS

In terms of Protected Areas (PA), the site falls within the Gouritz Cluster Biosphere Reserve and falls within an industrial area within the Transition Zone of the reserve. The Transition Zone is usually the largest part of the biosphere reserve and is where the greatest development activity is allowed, promoting economic and human development that is socio-culturally and ecologically sustainable. The Core Zone comprises a strictly protected zone that contributes to the conservation of landscapes, ecosystems, species, and genetic diversity, while the Buffer Zone (usually surrounding the Core Zone) is managed to support the conservation objectives of the Core Zone (UNESCO, 2022).

No other PAs occur in the vicinity of the site with the nearest being the Mossel Bay Seal Island Provincial Nature Reserve situated 10.6 km to the east, just offshore within the Bay.

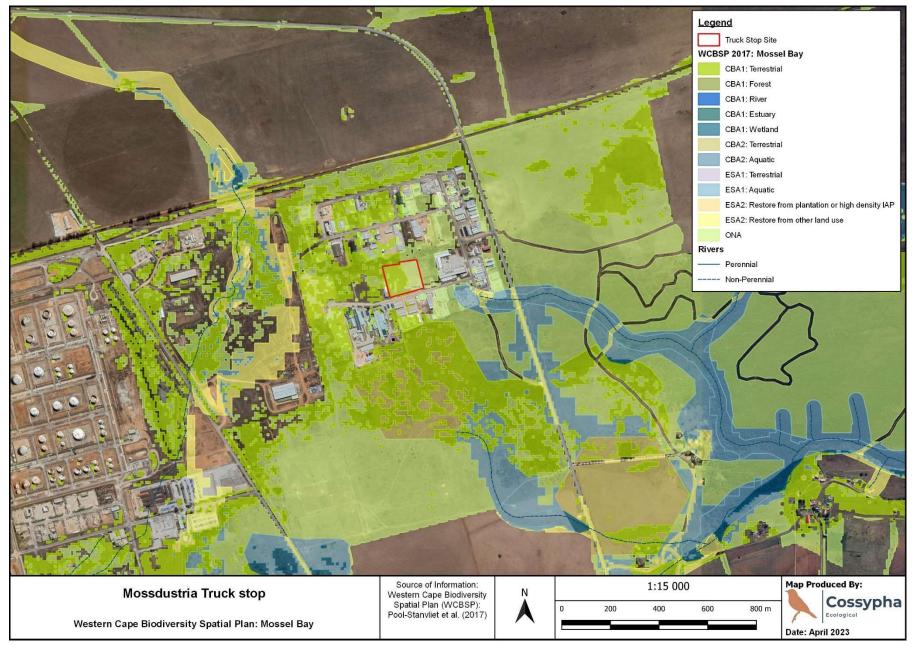


Figure 5: The study area in relation to the WCBSP

6.2 HISTORICAL LAND USE OF THE STUDY AREA

Historical satellite imagery (Google Earth ©) shows that the site has been part of the Mossdustria precinct since 2004 (possibly prior) and was cleared of vegetation in 2009, 2019, and October 2022 (see images below).



Historical satellite imagery from 2004 showing the site (red polygon) within the Mossdustria precinct



Historical satellite imagery from 2009 (left) and 2022 (right) showing the site cleared of vegetation

7. FIELD SURVEY RESULTS

A general description of the status quo of the site is given below, with more details of each sample point provided in a table in the next section. The table also gives the likelihood of faunal SCC occurring at each point.

7.1 SITE DESCRIPTION

The site is highly disturbed considering the recent clearing (~October 2022) and is comprised mostly of patches of bare ground and secondary patchy vegetation, scattered with common indigenous and alien grasses and shrubs. Faunal activity on the site was very low with only common and generalist birds and small mammals recorded. Some of the species recorded on the site included Barn Swallow *Hirundo rustica*, Karoo Prinia *Prinia maculosa*, Cape Bulbul *Pycnonotus capensis*, and Common Mole-Rat *Cryptomys hottentotus*. No faunal SCC were recorded during the site surveys. The habitat on the site is disturbed and generally of poor quality and it is highly unlikely that the available habitat would support any individuals or populations of faunal SCC.



The site with patches of bare ground and disturbed secondary vegetation

7.2 SAMPLE POINT DESCRIPTIONS

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
S1 03-Apr-23 34°09'42.14"S 22° 0'19.50"E	 Photo 1: Disturbed south-western corner of the site near Mkuzi Street, with common grasses and alien vegetation. Photo 2: Disturbed south-eastern corner of the site near Mkuzi St, with common grasses and alien vegetation. 	Low		
S2 03-Apr-23 34° 9'41.49"S 22° 0'17.39"E	Bare ground and sparse vegetation near the western interior of the site	Low		
S3 03-Apr-23 34° 9'39.84"S 22° 0'16.48"E	Western boundary wall (Photo 1) and north- western corner (Photo 2), with bare patches, common grasses, and alien vegetation.	Low		

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
S4 03-Apr-23 34° 9'38.80"S 22° 0'17.21"E	Northern boundary of the site with mostly alien vegetation.	Low		
S5 03-Apr-23 34° 9'38.79"S 22° 0'18.60"E	 Photo 1: Northern boundary of the site with mostly alien vegetation and bare patches of ground. Photo 2: Interior of the site looking southwest with patches of bare ground and common grasses. 	Low		
S6 03-Apr-23 34° 9'38.87"S 22° 0'20.87"E	North-eastern corner of the site with patches of bare ground, common grasses, and alien vegetation.			

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
S7 03-Apr-23 34° 9'40.22"S 22° 0'18.66"E	Disturbed interior of the site with bare ground, common grasses, and alien vegetation.	Low		
S8 03-Apr-23 34° 9'40.30"S 22° 0'20.99"E	Eastern boundary fence with patches of bare ground, common grasses, and alien vegetation.	Low		
S9 03-Apr-23 34° 9'41.23"S 22° 0'20.21"E	Disturbed south-eastern corner of the site near Mkuzi Street with patches of bare ground, common grasses, and alien vegetation.	Low		

8. SUMMARY AND RECOMMENDATIONS

8.1 SUMMARY

Overall, the assessment area displays a very low sensitivity from a terrestrial faunal perspective. The site is in a modified state due to the previous clearing of vegetation and overall disturbances adjacent to the site. The habitat is comprised mostly of patches of bare ground and secondary patchy vegetation, scattered with common indigenous and alien grasses and shrubs. Faunal activity on the site was very low and no faunal SCC were recorded during the site survey. The site does not provide sustainable habitat for fauna due to its disturbed and fragmented / isolated nature being surrounded by industrial land uses such as warehouses, and roads, and is highly unlikely to support any individuals or populations of faunal SCC.

8.2 IMPACT MANAGEMENT

The perceived impacts from the proposed development from a terrestrial faunal perspective are considered to be negligible. The following recommendations are however important for ensuring the impacts are kept to a minimum, and must be included in the Environmental Management Programme (EMPr):

- 1. An experienced, independent Environmental Control Officer (ECO) must be appointed to oversee the construction activities and compliance with the EMPr.
- 2. During construction, no wild animal may under any circumstance be handled, removed, or be interfered with by construction workers. No wild animal may under any circumstance be hunted, snared, captured, injured, or killed. This includes animals perceived to be vermin.
- 3. Alien plant eradication and control must be undertaken throughout the construction phase and the operational phase.

8.3 CONCLUSION

It is the opinion of the specialist that the impacts on terrestrial fauna will be negligible considering the modified and currently disturbed state of the site, and that the project may be authorised subject to the recommendations in the EMPr being adhered to.

- This compliance statement is applicable to the study area as described in the EIA documentation and shown in and Figure 4;
- Due to the disturbed and modified nature of the habitat, the study area is confirmed to be of **Low** sensitivity for the Terrestrial Animal Species theme;
- It is likely that the proposed development will not have any impact on terrestrial animal SCC; and
- There are no conditions to which this compliance statement is subjected.

9. **REFERENCES**

- DFFE (2022): National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), The Revised National List of Ecosystems that are Threatened and in need of Protection, *Government Gazette Number 47526*, Notice 2747, 18 November 2022, Pretoria: Department of Forestry, Fisheries and the Environment.
- Mucina, L. and Rutherford, M.C. (2006): The vegetation of South Africa, Lesotho and Swaziland, *Strelitzia 19*, Pretoria: South African National Biodiversity Institute.
- Mucina, L. and Rutherford, M.C. (2018): Vegetation Map of South Africa, Lesotho and Swaziland [vector geospatial dataset], Pretoria: South African National Biodiversity Institute.
- Pool-Stanvliet, R., Duffell-Canham, A., Pence, G. and Smart, R. (2017): *The Western Cape Biodiversity Spatial Plan Handbook*, Stellenbosch: CapeNature
- Rutherford, M.C. and Westfall, R.H. (1994): *Biomes of Southern Africa: an objective categorisation*, Pretoria: National Botanical Institute.
- SANBI (2021): South Africa's Terrestrial Red List of Ecosystems (RLE) 2022: Technical report on the revision of the "List of terrestrial ecosystems that are threatened and in need of protection", Report 7639, Pretoria: South African National Biodiversity Institute.
- SANBI (South African National Biodiversity Institute) (2020): Species Environmental Assessment Guideline. Guidelines for the implementation of the Terrestrial Fauna and Terrestrial Flora Species Protocols for environmental impact assessments in South Africa, Pretoria: South African National Biodiversity Institute, Version 3.1 2022.

UNESCO (2022): https://en.unesco.org/biosphere/africa.

APPENDICES

APPENDIX A: ABRIDGED CV OF THE SPECIALIST

Name and Surname	:	Robyn Phillips
Date of Birth	:	28 08 1975
Company Name	:	Cossypha Ecological
Field of Expertise	:	Terrestrial Ecologist and Avifaunal Specialist
SACNASP Registration	:	Pr.Sci.Nat. 400401/12 (Zoological and Ecological Sciences)
Highest Qualification	:	MSc (Zoology) cum laude
Years of Experience	:	21
Contact Number	:	084 695 1648
Email	:	robyn@cossypha.co.za

The first half of my professional career was spent working in ecological research at the University of KwaZulu-Natal. Since starting in consulting in 2011, I have been involved in many projects requiring biodiversity surveys and ecological assessments as part of the legislated requirements for the Environmental Impact Assessment (EIA) process. These studies Include field assessment of habitat, species occurrence (especially those of conservation concern), assessment of ecological importance and sensitivity of floral and faunal communities and habitat, as well as assessment of impacts. Tasks also include making recommendations and prescribing mitigation measures after applying the mitigation hierarchy, aimed at minimising impacts.

Following is a selection of similar projects undertaken:

- Terrestrial Animal Species Compliance Statement for the Proposed Rehabilitation of the Road Tr75/1 (N12 Highway), Oudtshoorn, Western Cape (Sharples Environmental Services) – 2023.
- Terrestrial Biodiversity and Animal Species Compliance Statement for the Proposed Development of a 9 MW Solar PV Plant, George, Western Cape (Sharples Environmental Services) 2023.
- Terrestrial Biodiversity and Animal Species Compliance Statement for the Proposed Amendment of the Environmental Authorisation for the Hartenbos Landgoed Phase 2 Residential Development on a Portion of the Farm Vaale Valley 219, Mossel Bay, Western Cape (Sharples Environmental Services) – 2022.
- Terrestrial Biodiversity and Animal Species Compliance Statement for the Proposed Residential Development of ERF 19374 George, Western Cape (Sharples Environmental Services) 2022.
- Terrestrial Biodiversity and Animal Species Compliance Statement for the Section 24G Application for the Unlawful Construction of a Road and Clearance of Vegetation at Waboomskraal, George Local Municipality, Western Cape (Sharples Environmental Services) 2022.
- Terrestrial Biodiversity (including Fauna and Flora) Compliance Statement for the proposed Ganyesa Landfill Site, Ganyesa, North West Province (GIBB Environmental) 2022.
- Faunal Assessment for the Proposed Upgrades and New Access Road to the Cape Flats Wastewater Treatment Works (WWTW), False Bay Nature Reserve, Cape Town, Western Cape (SRK / City of Cape Town) 2018 to 2022.
- Terrestrial Biodiversity Assessment (flora and fauna) for the KwaZulu-Natal Automotive Supplier Park (ASP) and Township Establishment, including bulk sewer pipeline and powerlines, Illovo South, Durban, KwaZulu-Natal (Dube TradePort Corporation (DTPC)) – 2018 to 2021.
- Terrestrial Faunal Assessment for the Proposed Rohill Business Estate, Red Hill, Durban North, KwaZulu-Natal (GCS) 2014.
- Terrestrial Faunal Assessment for the Proposed SAMRAND Industrial Estate, Midrand, Gauteng (Samrand Development (Pty) Ltd / Cavaleros Group) 2013.