

PEER REVIEWED REVISED ANIMAL SPECIES COMPLIANCE STATEMENT

**NIEUWE RUST HOUSING PROJECT ON ERF 182 AND 184 ON ±3.45HA. AREA A = ±0.92HA AND AREA B ±2.52HA. PROPOSED LAYOUT = 91 UNITS (10M X 15M = ±150M²)
A = 31 UNITS AND B = 60 UNITS.**

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DATE: JANUARY 2026



DECLARATION OF THE SPECIALIST

I **Nicolaas Willem Hanekom**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Nicolaas Hanekom
Pri.Sci.Nat (Ecology) 004415

20 January 2026

Signature of the EAP/ Specialist:

Date:

Enviro-EAP (Pty) Ltd

Name of company (if applicable):



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1. INTRODUCTION

Proposed development and area assessed.

Nieuwe Rust Housing project on erf 182 and 184 on ±3.45ha. Area A = ±0.92ha and Area B ±2.52ha. Proposed Layout = 91 units (10m x 15m = ±150m²) A = 31 units and B = 60 units.

Water

Portions A & B will require new internal reticulation networks, which will be 90mm diameter uPVC Class 12 pipes and will connect to the existing water mains in Olyf Street (Portion A) and Arcarcia Street (Portion B). Valves and hydrants will be provided at suitable positions.

Sewer

The internal network will be 160 mm diameter class 34 uPVC pipes with 110 mm diameter erf connections.

Stormwater

Stormwater from Erf 184 will all be collected in stormwater pipe infrastructure in road reserves and connected to Jakaranda street stormwater infrastructure in a southern direction towards existing town stormwater infrastructure. The southern section of Erf 182 will all be collected in stormwater pipe infrastructure in road reserves and connected to Jakaranda street stormwater infrastructure in a southern direction towards existing town stormwater infrastructure. A small area of the development stormwater will be collected in stormwater pipe infrastructure in road reserves and release to the north east in a stormwater pond with a 1:50 year flood overflow release into the surrounding area which will allow for when stormwater is release to seep through the cultivated land towards the non-perennial river.



Roads

The new roads for Portions A and B will connect to the existing Olyf Street and Arcarcia Street respectively. The new internal roads will consist of a combination of premix and paved surfaces and will be 10m and 8 m wide, but not longer than 1km.

The Ecological Site Sensitivity is mapped to be low. The screen tool report incorrectly mapped a high sensitivity area in the northern section. This area is transformed and used for small farming activities.

This compliance statement report presents the findings of the animal species verification and site survey that was conducted by Nicolaas Hanekom.

The animal species compliance statement, must contain, as a minimum, the following information:

- Contact details and curriculum vitae of the specialist including SACNASP registration number and field of expertise; - **Refer to cover page, section 1.1. and Appendix A of this report**
- A signed statement of independence by the specialist; **Refer to page 2 of this report**
- A statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment; **Refer to section 2.**
- A description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant; **Refer to section 3.**
- Where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr; **Refer to section 4.**
- A description of the assumptions made and any uncertainties or gaps in knowledge or data; **Refer to section 5.**
- The mean density of observations/ number of samples sites per unit area; and **Refer to section 6.**
- Any conditions to which the compliance statement is subjected. **Refer to section 7.**

1.1. Background & Competency

Nicolaas Hanekom is a registered Professional Natural Scientist in the ecological science field with the South African Council for Natural Scientific Professions (“SACNASP”), (Ecology field) and a qualified registered Environmental Assessment Practitioner (“EAP”) who holds a Masters Technologiae, Nature Conservation (“Vegetation Ecology and Biodiversity Assessment”) degree from the Cape Peninsula University of Technology (Refer to Appendix A, CV). Nicolaas Hanekom is suitably qualified SACNASP registered specialist. Nicolaas Hanekom (the specialist) is suitably qualified in terms of the protocols as an Ecologist. Ecologist is a recognised registration for Animal Studies. Nicolaas Hanekom did his first fauna specialist report in 2006. Most of the reports reference in the CV refers to biodiversity assessments. These biodiversity



assessments include fauna (animals) sections in the reports since fauna is a subsection of biodiversity. Then since 2019 when the protocols Nicolaas Hanekom did first terrestrial animal impact assessments and compliance statements in terms of the protocols, and after 2020, when the protocols were amended, he did animal impact assessments.

1.2. Scope and Objectives

The protocol¹ provides the criteria for the reporting of requirements for the assessment and reporting of impacts on animal species for activities requiring environmental authorisation.

General Information

An applicant intending to undertake an activity identified in the Scope of this Protocol, on a site identified as being of “very high or high sensitivity” for animal species on the national web based environmental screening tool must submit an Animal Species Impact Assessment Report. However, where the information gathered from the Initial Site Sensitivity Verification and the specialist assessment differs from the designation of “very high or high” animal species sensitivity from the national web based environmental screening tool and it is found to be of a “medium or low” sensitivity, then an animal species impact assessment is not required. Should this apply, an Animal Species Compliance Statement is to be provided.

1.3. Terms of Reference

The Animal Species Compliance Statement, must be prepared by a suitably qualified specialist in the field of Zoological Science or Ecological Science, on the site being submitted as the preferred development site and must verify:

- That the site is of “low” sensitivity for animal species; and
- Whether or not the proposed development will have any impact on the biodiversity feature.

2. BASELINE PROFILE DESCRIPTION OF BIODIVERSITY AND ECOSYSTEMS, INCLUDING A STATEMENT ON THE DURATION, DATE AND SEASON OF THE SITE INSPECTION AND THE RELEVANCE OF THE SEASON TO THE OUTCOME OF THE ASSESSMENT

The following animal species were listed in the screen tool report. *Circus maurus* (high sensitivity), *Lepidochrysops mcgregori*, Sensitive species 32, *Brinckiella mauerbergerorum* and *Peringueyacris namaqua* (medium sensitivity).

¹ Published in Government Notice No. 648 GOVERNMENT GAZETTE 4542110 MAY 2019. This gazette is also available free online at www.gpwonline.co.za

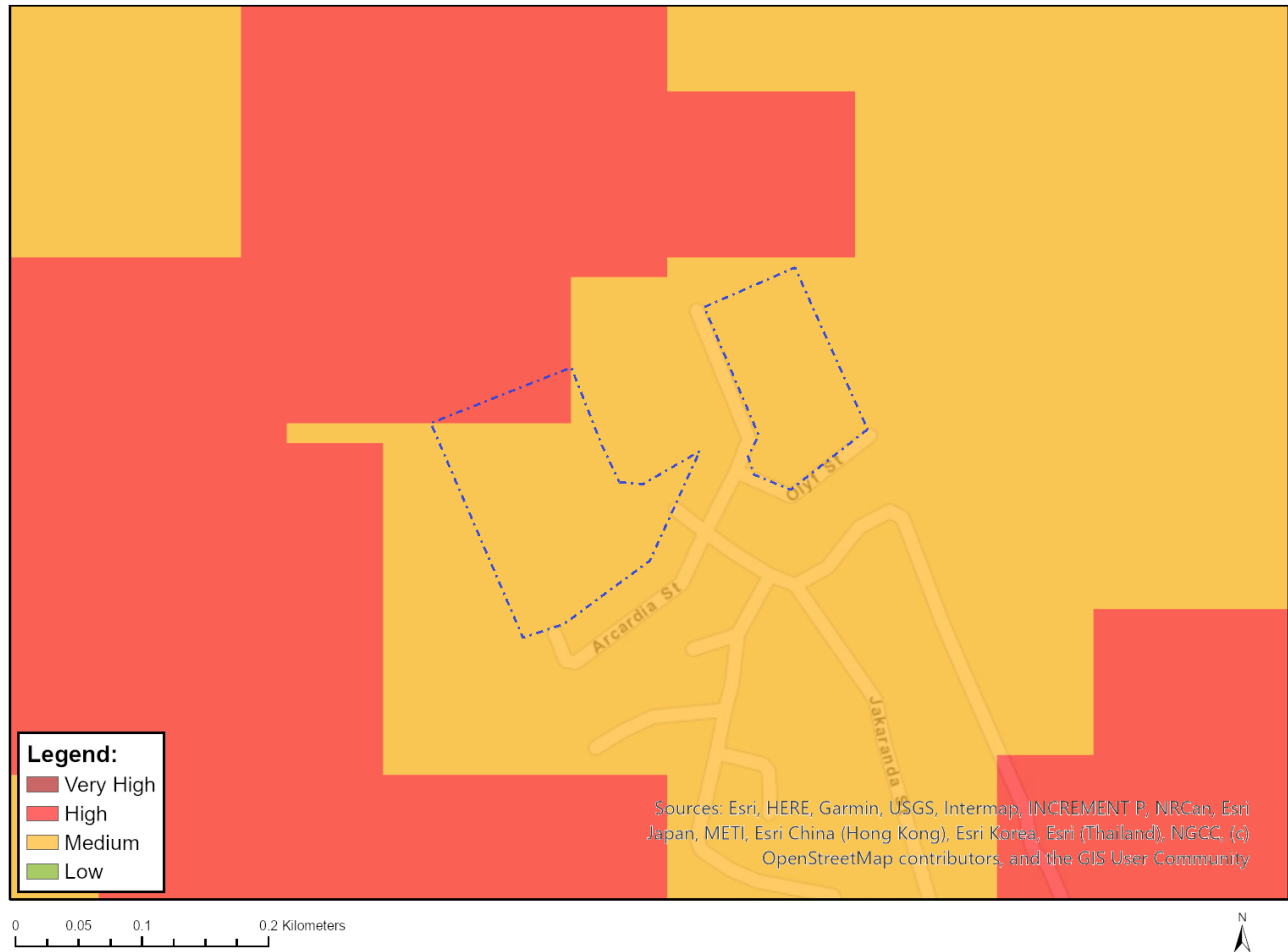


Figure 1: Project Area of Influence map relevant to plant species as per the environmental screen tool report.

Species	Threat status	Habitat requirements	Likelihood of occurrence based on habitat and current records
Black Harrier <i>Circus maurus</i>	EN	1,340,000km ² 251-999 individuals This species occurs in coastal and montane fynbos in the Western Cape particularly near vleis, marshes, streams or dams as well as dry grasslands, Karoo	Low Was not recorded on site and not likely to roam the area. The black harrier is a small mammal specialist which feed mostly on small rodents and birds and will occasionally take reptiles, catching them while flying



		<p>subdesert scrub, open plains with low shrubs and croplands. In renosterveld breeding restricted to intact patches exceeding 100ha.</p> <p>Breeds close to coastal and upland marshes with tall shrubs or reeds, damp sites, near vleis, marshes or streams, are preferred for breeding. Nests are shallow platform nests built on the ground, either dry or damp underfoot and not over water. Concealed by rank vegetation. This species breeds from Aug- Nov with nestlings departing approximately two months later.</p> <p>Prefers open ground with low vegetation for hunting, where it feeds on a diet comprising mainly of small mammals, especially <i>Otomys</i> and <i>Rhabdomys</i> species at coastal sites and birds in montane habitats. At inland sites the diet shifts between small mammals to birds depending on the season.</p> <p>(BirdLife Int., 2016; Taylor et al., 2015; Tarboton, 2014 and Chittenden, 2009)</p>	<p>low over its hunting grounds. The vegetation on site is mostly denuded with sparse vegetation cover as a result of small farming and community impacts and does not represent habitat for any small mammals that can be preyed upon by the black harrier. Primary nesting habitat is not present.</p>
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<p>Sensitive species 32</p>	<p>EN</p>	<p>Habitat not on site, but is present to the north of the site.</p>	<p>Low Was not recorded on site. Habitat in the project area is not appropriate for this species. The impact area is small and next to existing town and therefore will not impact this species negatively. The vegetation on site is mostly denuded with sparse vegetation cover as a result of small farming and community impacts and does not represent habitat for this species. They will definitely occur to the non cultivate area to the west of the site, but the cultivate lands next to the development footprints will restrict their movement onto this area.</p>
<p><i>Brinckiella mauerbergerorum</i></p>	<p>VU</p>	<p>Mauerberger's Winter Katydid is Vulnerable under criteria B1 and B2 because its extent of occurrence and area of occupancy are small (12000 and 40 km², respectively), it has only been recorded in ten locations, and area and extent of its habitat are estimated to be in decline. This species occurs within the Succulent Karoo and Fynbos biomes of Northern Cape and Western Cape Provinces, South Africa. Both biomes are notable</p>	<p>Low Was not recorded on site. Habitat in the project area is not appropriate for this species. No succulent shrubs recorded on site. The impact area is small and next to existing town and therefore will not impact this species negatively. The vegetation on site is mostly denuded with sparse vegetation cover as a result of small farming and community impacts and does not represent habitat for this species.</p>



		<p>biodiversity hotspots, naturally geographically restricted and under anthropogenic stress. This habitat type is predominantly utilized for livestock grazing, which causes shifts to the vegetation assemblage and can be detrimental to the species' host plants. This genus experienced an adaptive radiation in the Fynbos and Succulent Karoo biomes of Western and Northern Cape Provinces, South Africa, with at least 9 species known in a relatively small geographic area. Mauerberger's Winter Katydid has not been found within any nature reserve. This species is found in the Succulent Karoo biome, on succulent shrubs.²</p>	
<p><i>Peringueyacris namaqua</i></p>	<p>VU</p>	<p><i>Peringueyacris namaqua</i> is found in the Namaqualand region of South Africa. It is assessed as Vulnerable (VU) due to the fairly restricted geographic range of the species, with an extent of occurrence (EOO) of less than 15,000 km² and a limited number of locations (no more than</p>	<p>Low Was not recorded on site. Habitat in the project area is not appropriate for this species. Its host plants were not recorded on site. The impact area is small and next to existing town and therefore will not impact this species negatively. The vegetation on site is mostly denuded with sparse vegetation cover as a result</p>

² <https://speciesstatus.sanbi.org/taxa/detail/4301/>



		<p>10). In addition, the EOO, number of mature individuals, and number of sub-populations are inferred to be declining, based on threats to the habitat of the species resulting from climate change (warmer and drier conditions), agriculture, and mining, as well as the species being very rarely encountered in the field.</p> <p>Distribution <i>Peringueyacris namaqua</i> is endemic to South Africa, where it is found in the Namaqualand region along the west coast of the country. Its extent of occurrence (EOO) is ca 14,000 km².</p> <p>Habitat Terrestrial <i>Peringueyacris namaqua</i> inhabits the succulent Karoo vegetation biome, a type of semi-desert. Documented host plants for <i>Peringueyacris namaqua</i> include <i>Pentzia incana</i> and <i>Eriocephalus aspalathoides</i>. It is the smallest of the bladder grasshopper species (Dirsh 1965). Alternate male morphs (sneaker males) have been documented for <i>Peringueyacris namaqua</i></p>	<p>of small farming and community impacts and does not represent habitat for this species.</p>
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		<p>(Donelson 2007) and, unlike other species, these appear to be proportionately common, as they are more numerous in museum collections than primary males. These alternate males were originally described by Dirsh (1963) as a separate species, <i>Pneumoracris browni</i>.</p> <p>Population trend <i>Peringueyacris namaqua</i> emerges seasonally, and has been observed from August to November. The population size and trends have not been studied, but the number of mature individuals and sub-populations is inferred to be declining based on ongoing threats to the species' habitat. The species is very rarely encountered in the field, despite the geographic area where the species occurs being fairly well surveyed.</p> <p>Threats Threats to this species include climate change, resulting in warmer and drier conditions, as well as habitat destruction due to overgrazing by livestock, and agricultural and mining activities. Based upon</p>	
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		<p>the threat of overgrazing, the number of locations is between six and ten.</p> <p>Uses and trade This species is not utilised.</p> <p>Conservation There are no conservation actions for the species, and it is unknown whether it occurs in protected areas. Research into its ecology, threats and population trend is required. Remaining habitats of this species need to be protected and grazing regimes need to be adapted to avoid future declines.³</p>	
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The animal species listed in the environmental screen tool report was not observed or recorded on site and will also not be impacted on due to the surrounded developments and impacts and transformed nature of the vegetation. In terms of the invertebrate listed, the habitat is transformed, and their habitat is not present on site.

Below listing observed fauna or uploading verified records from recognised biodiversity database (e.g., iNaturalist) in close proximity. None were listed on the development site. Peers' Girdled Lizard (*Namazonurus peersi*) recorded in the Southern Namaqualand Quartzite Klipkoppe Shrubland to the west of the development area; Dwarf Plated Lizard (*Cordylosaurus subtessellatus*) recorded in the Southern Namaqualand Quartzite Klipkoppe Shrubland to the west of the development area; Banded Digger Bees (Genus *Amegilla*) recorded between Nuwerus town and N7; Brown Buttonspider (*Latrodectus geometricus*) recorded between Nuwerus town and N7; Southern Baboon Spiders (Subfamily Harpactirinae) recorded between Nuwerus town and N7; *Opisththalmus granifrons* recorded between Nuwerus town and N7; Cape Skink (*Trachylepis capensis*) recorded between Nuwerus town and N7; *Delta caffrum* recorded in southern section of Nuwerus town; Spotty Conehead Mantid (*Empusa binotata*) recorded in southern section of Nuwerus town.

³ <https://speciesstatus.sanbi.org/assessment/last-assessment/4383/>



3. A DESCRIPTION OF THE METHODOLOGY USED TO UNDERTAKE THE SITE SURVEY AND PREPARE THE COMPLIANCE STATEMENT, INCLUDING EQUIPMENT AND MODELLING USED WHERE RELEVANT

A literature review and desktop analysis were undertaken prior to the field investigation. Literature sources included:

- Amphibians –Du Preez & Carruthers (2009), FrogMap (FitzPatrick, 2023).
- Reptiles – Alexander & Marias (2007), ReptileMap (FitzPatrick, 2023).
- Mammals –MammalMap (FitzPatrick, 2023).
- IUCN, 2023.
- iNaturalist, 2023.

Recent and historical aerial imagery of the site was reviewed in order to identify points for investigation during the field survey. Utilising the above information, a field investigation was undertaken whereby:

- Sites of geomorphological or topographic variance were identified and subjected to an evaluation of species present within transects established across the selected site.
- Species were identified and collated.
- Additional random sample points were selected from other sites surrounding the proposed impacted areas for comparative purposes.

The assessments entailed both a literature review of the region, as well as on site evaluations, during which specific primary data was collected and evaluated. In addition, the identification of key ecological features was undertaken allowing for the interpretation of the prevailing habitat form and associated processes.

All data collected in the field and during the literature review was evaluated and interpreted in order to provide an understanding of the nature of the prevailing environment at a landscape and habitat level. In addition, specific evaluation of data relating to habitat form and structure was undertaken, aiding in the identification of bio-physical anomalies within the prevailing environment. Such variance may be considered to be indicative of differing habitat forms, which under consideration, may be of higher order ecological value in relation of the prevailing environment.

The presence of fauna must be evaluated based on the literature and available databases but in many cases, these databases are not intended for fine-scale use and the reliability and adequacy of these data sources relies heavily on the extent to which the area has been sampled in the past. Many areas have not been well sampled with the result that the species lists derived for the area do not always adequately reflect the actual fauna and flora present at the site. Cryptic/nocturnal animals might not have been sampled and encountered. This is acknowledged as a limitation of the study, however it is substantially reduced through extracting the species lists for a substantially larger area than the site and through the inclusion of



information from previous experience in the wider area. The assessment was undertaken using sampling methods appropriate to the protocols, terms of reference and methodologies described above.

For the Avi-Fauna point counts, which involve standing at designated locations to record birds seen or heard, walking transects, walk along predefined lines, observations when in the area, historical recordings and history of visiting the area over years were used as sampling methods. Sampling was done in December and within the months recommended in the Species Environmental Assessment Guidelines.

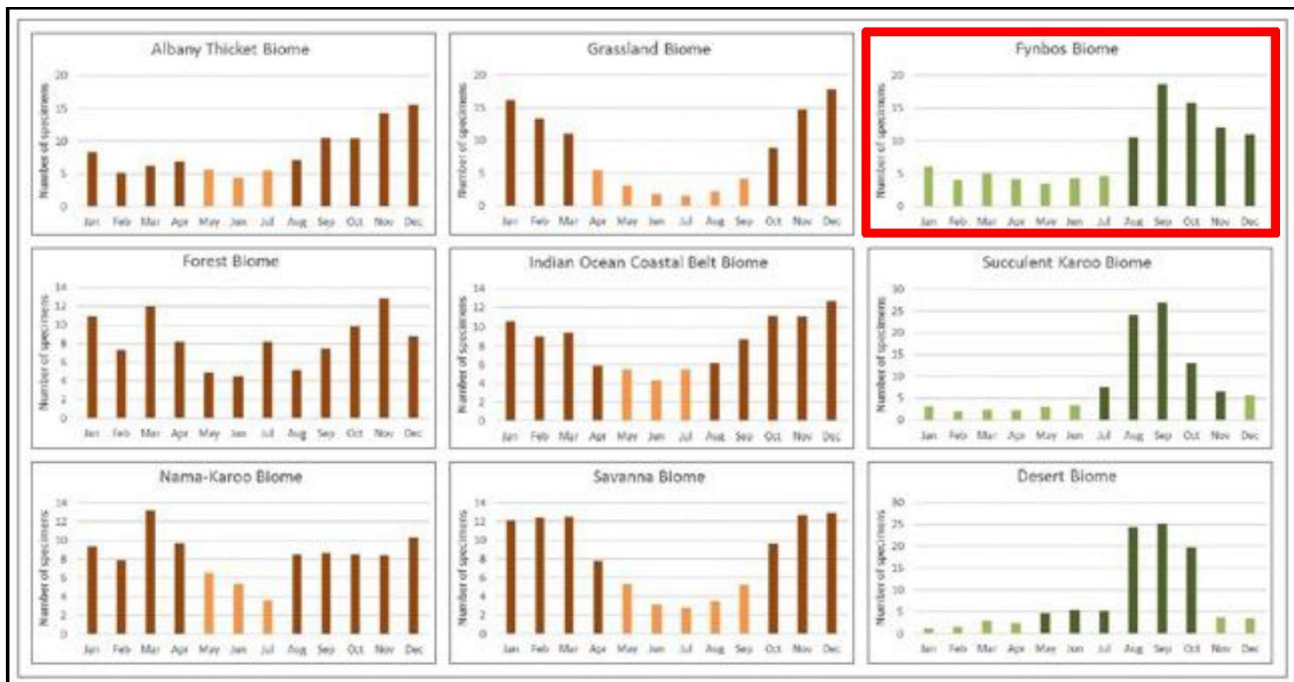


Figure 2: Recommended survey periods for different biomes (Species Environmental Assessment Guidelines). The site is within the fynbos biome.

The study area was surveyed on foot, and all animal species, activities or footprints in the greater study area were noted. Various transects were conducted to cover the area. Particular attention was paid to potential fauna and flora Species of Conservation Concern that could have been present. Various photographs were taken.

For the Species of Conservation Concern (SCC) surveys and sampling the following techniques were used. For Avi-Fauna, surveys were focus on observations while walking, using elevated areas to do surveys over time using binoculars, observations while driving and knowledge of years visiting the area. For mammals surveys was focus on direct observations were made by walking through the project area and recording species seen. In addition,



habitats that typically provide refuge for faunal species were targeted to search for specific species.

Reptiles and terrestrial amphibians were targeted in microhabitats by lifting rocks and logs, peeling away bark and scraping through leaf litter. Binoculars were used to view and record mammal and Avi-Fauna species from a distance without disturbing them. While walking the project area, mammals and Avi-Fauna are often flushed from hiding and were recorded.

Indirect observation is the searching for evidence of faunal presence and includes spoor, skat, roadkill, skulls, quills, dens, burrows, hairs, scrapings, and diggings.

Various photographs were taken. The site visit was conducted 15 August 2024, which is an optimal time.



Photograph 1: Status and habitat condition on erf 182.



Photograph 2: Status and habitat condition on erf 184.



Photograph 3: Status and habitat condition on erf 184.



Photograph 4: View of typical Southern Namaqualand Quartzite Klipkoppe Shrubland and animal species in the area habitat.

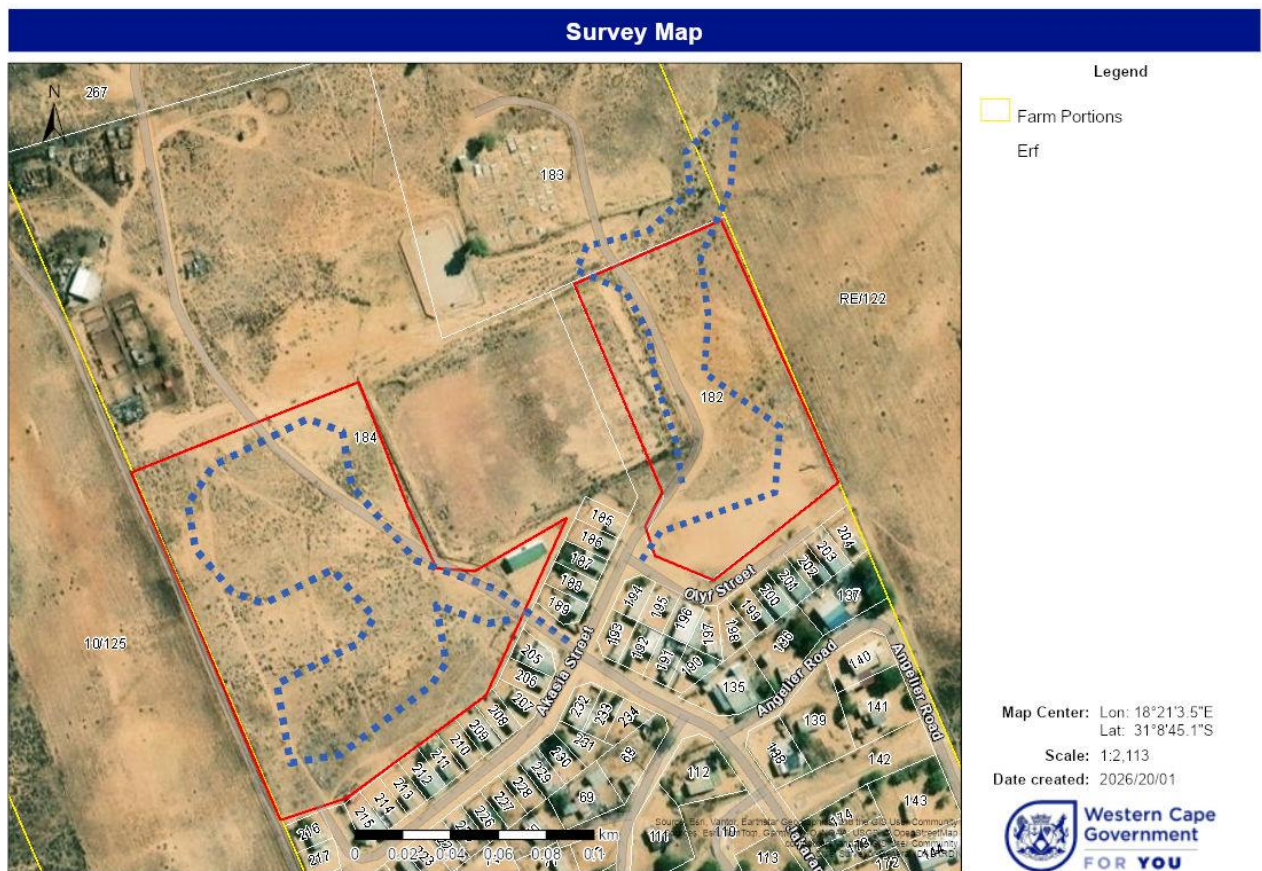


Figure 3: Survey route map indicated by blue dotted line

4. WHERE REQUIRED, PROPOSED IMPACT MANAGEMENT ACTIONS AND OUTCOMES OR ANY MONITORING REQUIREMENTS FOR INCLUSION IN THE EMPR

- Should any faunal SCC be encountered during construction, these must be recorded (i.e. be photographed, GPS co-ordinates taken) and photographs placed on iNaturalist
- Any faunal species that may die as a result of construction activities must be recorded (i.e. be photographed, GPS co-ordinates taken) and these records placed on iNaturalist.
- In addition to all mitigations listed above a clause must be included in contracts for ALL personnel working on site stating that: “no wild animals will be hunted, killed, poisoned or captured. No wild animals will be imported into, exported from or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass.” A clause relating to fines, possible dismissal and legal prosecution must be included should any of the above transgressions occur, especially for SCC.



- Fauna chance-find protocol, restrictions on night lighting, pet control during construction, and alien-plant clearing must be included in EMPr.

5. A DESCRIPTION OF THE ASSUMPTIONS MADE AND ANY UNCERTAINTIES OR GAPS IN KNOWLEDGE OR DATA

The site visit was conducted 15 August 2024. The survey and site visit was done in an optimal time for animal species. The overall confidence in the completeness and accuracy of the animal species findings at this point in time is considered to be good. A follow-up survey is not considered essential for decision-making.

6. THE MEAN DENSITY OF OBSERVATIONS/ NUMBER OF SAMPLES SITES PER UNIT AREA

Sample plots or sites was not used as a result of the small scale of the development and area. Surveys were conducted at habitats that could host animal species. No animal species of conservation concern were recorded nor is their preferred habitat present on site. The animal species listed in the environmental screen tool report was not observed or recorded on site and will also not be impacted on.

7. ANY CONDITIONS TO WHICH THE COMPLIANCE STATEMENT IS SUBJECTED

The findings, results, observations, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

8. REFERENCES

Alexander G Marais J. 2007. a Guide To The Reptiles Of Southern Africa.

Barnes K.N. 2000. The Eskom Red Data book of birds of South Africa, Lesotho and Swaziland. BirdLife South Africa, Johannesburg.

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APPENDIX A SPECIALIST CV

CURRICULUM VITAE – NICOLAAS WILLEM HANEKOM

Profession: Environmental Scientist and Environmental Assessment Practitioner

Date of Birth: 01/02/1967

BIOGRAPHICAL SKETCH

Nicolaas Hanekom is a registered Professional Natural Scientist in the ecological science field with the South African Council for Natural Scientific Professions (“SACNASP”), (Ecology field) and a qualified registered Environmental Assessment Practitioner (“EAP”) who holds a Masters Technologiae, Nature Conservation (“Vegetation Ecology and Biodiversity Assessment”) degree from the Cape Peninsula University of Technology (Refer to Appendix A, CV). Nicolaas Hanekom is suitably qualified SACNASP registered specialist. Nicolaas Hanekom (the specialist) is suitably qualified in terms of the protocols as an Ecologist. Ecologist is a recognise registration for Animal Studies. Nicolaas Hanekom did his first fauna specialist report in 2006. Most of the reports reference in the CV refers to biodiversity assessments. These biodiversity assessments include fauna (animals) sections in the reports since fauna is a subsection of biodiversity. Then since 2019 when the protocols Nicolaas Hanekom did first terrestrial animal impact assessments and compliance statements in terms of the protocols, and after 2020, when the protocols were amended he did animal impact assessments.



He has also completed the suite of Greener Governance courses with certificates in;

- An Overview of Environmental Management at the Local Government Level, Centre for Environmental Management, North-West University;
- Greener Governance for Local Authorities, Centre for Environmental Management, North-West University;
- Tools for Integrated Environmental Management and Governance, Centre for Environmental Management, North-West University.

He further attended and obtained a certificate on Integrated Protected Area Planning at the Centre for Environmental Development, University of Kwa Zulu Natal and a certificate in Project Management (Theory and Practical), through CS Holdings. Nicolaas has lectured in two subjects at the Cape Peninsula University of Technology. He has 26 years of environmental planning experience, working for Free State and Western Cape departments of environmental affairs, where he reviewed and commented on development (EIA) applications, in the West Coast Region.

He has, as practising EAP been responsible for many environmental impact assessments and EIA applications, waste license and atmospheric emission license applications.

He has also been involved in the implementation of several environmental management systems. He has engaged successfully with various clients as set out below.

Areas of specialisation:	<ul style="list-style-type: none"> • Ecosystem (terrestrial and aquatic) monitoring and assessments • Design of monitoring programmes for ecosystems (terrestrial and aquatic) • Environmental Impact Assessments • River classification and environmental water requirements • Wetlands Delineation • River and Wetlands management • Water Use Authorization Applications • Water quality management • River Health Assessments
Countries of Work Experience:	South Africa (Northern Cape, Western Cape, Free State, Mpumalanga, Gauteng)
Employment Record	<ul style="list-style-type: none"> • Student at Bontebok National Park (1992) • Assistant Reserve Manager at Gariep Dam Nature Reserve, Free State (1993 - 1998) • Reserve Manager, Conservation Services Manager for Western Cape Nature Conservation Board (1998 - 2006)



	<ul style="list-style-type: none"> • External Lecturer at Cape Peninsula University of Technology (2003 - 2005) • Director: Environmental Management at Cape Lowlands Environmental Services (2006 – 2010) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Eco Impact (Pty) Ltd (2010 – to August 2019) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Enviro-EAP (Pty) Ltd (September 2019 – to date)
<p>Professional membership, accreditations and courses</p>	<ul style="list-style-type: none"> • South African Council for Natural Scientists Professions Pri.Sci.Nat (Ecological Science) • Riparian vegetation identification and health assessment. Internal Western Cape Nature Conservation short course presented by Dr C Boucher (Stellenbosch University) in 2000. • SASS5 Aquatic Biomonitoring Training Course. 2 to 5 September 2013. Ground Truth Water and Environmental Engineering consultancy in partnership with the Department of Water Affairs. • Workshop on “Section 21(c) and (i) Water Use Training: Understanding Watercourses and Managing Impacts to their Characteristics”. 10 May 2017. Presented by Dr Wietsche Roets of the Department of Water and Sanitation (Sub-Directorate: Instream Water Use).
<p>Summary of experience</p>	<p>1992: South African National Parks. Student at Bontebok National Park with management and monitoring actions related to the Breede River.</p> <p>1993 -1998: Free State Nature Conservation. Ecological management and monitoring actions related to the Gariiep Dam, Orange and Caledon Rivers.</p> <p>1998 -2006: CapeNature. Ecological management and monitoring actions related to the Berg River Estuary, Verlorenvlei, Lamberts bay’s Jackalsvlei, Wadriif Soutpanne, Oliphant’s River mouth, Rocherpan Nature Reserve, etc. Review and assessment of EIA applications, inclusive of Freshwater ecology. Did some site visits with Department of Water Affairs and Forestry (Hester Lyons) to confirm the presence of aquatic ecological features during EIA water use registration applications.</p> <p>2006 to date: Cape Lowland Environmental Services, Eco Impact Legal Consultant and Enviro-EAP. Ecological (Freshwater and aquatic) Specialist input, assessment, monitoring and reports.</p>
<p>Publications and assessment reports</p>	<p>Just to name a few. Was involved in many Ecological Assessments, monitoring and inputs in EIA applications.</p> <ul style="list-style-type: none"> • Elandskloof Farm 475 Citrusdal Biodiversity Baseline Survey. August



2010. This Biodiversity Assessment Covering Terrestrial (fauna and flora) and Aquatic Aspects to Inform Decisions Regarding The Proposed Elandskloof Weir Flood Damage Project On Farm 475, In The Citrusdal Area.

- Cape Solar Energy Electricity Generation Facility. Farm 187/3 & 187/13 Kenhardt. Biodiversity And Ecological Baseline Survey. January 2011. (Included Terrestrial (fauna, flora and Avi-fauna) and aquatic ecological assessments and water use authorization applications)
- Prieska Photovoltaic Power Generation Project. Prieska Commonage Northern Cape. Biodiversity And Ecological Baseline Survey. July 2011. (Included Terrestrial (fauna, flora and Avi-fauna) and aquatic ecological assessments and water use authorization applications)
- Witteklip Erf 123 Extension, Vredenburg. Biodiversity Baseline Survey. Updated - October 2012 (Included Terrestrial (fauna, flora and Avi-fauna) and aquatic ecological assessments and water use authorization applications)
- Baseline Biodiversity Survey And Wetland Delineation for ECCA Holdings: Cape Bentonite Mine on Erf 1412 Near Heidelberg. Prepared for: Shangoni Management Services Pry (Ltd). October 2014.
- Freshwater Impact Assessment Laingsburg Flood Damage Repairs & Storm Water Infrastructure. 18 February 2016.
- Ecological Assessment for Swartland Municipality - Upgrades To Voortrekker/Bokomo Road And Voortrekker/Rozenburg Road Intersections and Upgrade to the Diep River Bridge, Malmesbury on A Portion Of Erf 327, Malmesbury (Road) Erf 1530, Diep River Bridge Crossing, and Erf 1528, Property South of Diep River where Road Widening and Turning Circle Will Be Constructed. March 2016. (Freshwater Ecology Inputs and Water Use Registration)
- Freshwater Impact Assessment. McGregor Bridge, Robertson Bridge and Willem Nels River Maintenance Management Plan. 24 June 2016. (Freshwater Ecology assessment and input as well as Water Use Registration)
- Water Use Authorization Application Risk Matrix. Orange Grove Trust Vegetation Clearing and Agricultural Development on Portion 4 of Farm Glen Heatlie No 316, Worcester. 12 June 2017. (Freshwater ecological inputs in EIA process and Water Use Registration).
- Water Use Authorization Application Risk Matrix Prepared For: Witzenberg Municipality Sand Mine Farm 1 Prince Alfred Hamlet. 28 March 2017. (Freshwater ecological inputs in EIA process and Water Use Registration).



- Proposed Hartmanshoop Agri Vegetation Clearing Project and Irrigation on Erf 686, Laingsburg. 12 August 2017. (Freshwater ecological inputs in Water Use Registration).
- County Fair: Hocraft Abattoir And Rendering Facility Waste Water Treatment Works “CF Hocraft WWTW” Mosselbank River Second Quarter 2018 Biomonitoring Report. June 2018. (Done quarterly biomonitoring for the last three years).
- TERRESTRIAL PLANT SPECIES COMPLIANCE STATEMENT GOUDA PIGGERY (PTY) LTD, ON FARM DASDRIF RE/945, MOORREESBURG. February 2022
- ANIMAL SPECIES IMPACT ASSESSMENT. PROPOSED SALDANHA BULK DRY TERMINAL VEGETATION CLEARING AND ORE AND MINERAL SANDS BULK STORAGE FACILITY ON PORTIONS 1 OF FARM NO 1043, VREDENBURG. November 2020.
- ANIMAL SPECIES IMPACT ASSESSMENT FOR THE ATLANTIS PHOSPHATE MINE, LIME SALES LTD. PORTION 1 OF FARM 982, ATLANTIS. August 2022.
- ANIMAL SPECIES COMPLIANCE STATEMENT PROPOSED EXPANSION OF EXISTING CHICKEN LAYING HOUSES, REARING HOUSES AND HATCHERY INFRASTRUCTURE AT ROSS POULTRY BREEDERS, TURTLE SPRINGS, STANFORD. November 2022.
- THE PROPOSED SAND MINING ON PORTIONS OF REMAINDER OF FARM 781, CALEDON, WESTERN CAPE. August 2023.
- ANIMAL SPECIES IMPACT ASSESSMENT FOR THE THE PROPOSED 900 IRDP HOUSING ON PORTION 3 OF FARM 282 IN SALDANHA. PHASE 1: APPROX. 500IRDP ERVEN (APPROX. 11,4 HA) INSIDE URBAN EDGE. PHASE 2: APPROX. 400IRDP ERVEN (APPROX. 13,5 HA) OUTSIDE URBAN EDGE WITH A TOTAL DEVELOPMENT FOOTPRINT OF APPROXIMATELY 25HA. October 2023. ANIMAL SPECIES IMPACT ASSESSMENT
- RETAIL AND FUELING STATION DEVELOPMENT ON PORTION 7 OF FARM JACOBUSKRAAL NO 554, YZERFONTEIN. November 2023.
- TERRESTRIAL ANIMAL SPECIES IMPACT ASSESSMENT SISHEN IRON ORE MINE EXPANSION PROJECT APPLICATION. September 2022

CERTIFICATION



Enviro-EAP
Environmental Consultants



I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experience, and me.

Nicolaas Hanekom Pri Sci Nat (Ecology).
Registration number 004415