

PLANT SPECIES COMPLIANCE STATEMENT

THE PROPOSED STOMPNEUS BAY INTEGRATED RESIDENTIAL DEVELOPMENT
PROGRAMME (“IRDP”) HOUSING DEVELOPMENT AND ASSOCIATED
INFRASTRUCTURE OF APPROXIMATELY 5.9HA ON PORTION 4 OF FARM DUYKER
EILAND NO. 6, ST. HELENA BAY.



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AUGUST 2026



DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one 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
Signature of the Specialist:

14 AUGUST 2026
Date:

Enviro-EAP (Pty) Ltd

Name of company (if applicable):



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1. INTRODUCTION

The proposed development includes the following:

- 185 residential Zone 1 erven (approx. 120m² erven) for IRDP housing;
- 3 Open Space Zone I erven;
- 1 Institutional Zone I (Crèche);
- 1 Institutional Zone II (Church)
- roads situated in the 10m road reserves will be 5,5m and 5,0m wide, and associated infrastructure and services

It is therefore the intention to subdivide and rezone an area of ±5.9ha of said portion of land for the purpose of establishing a housing project



Sensitivity Mapping and Assessment (Site Ecological Importance)¹ Degraded Saldanha Granite Strandveld

Where the site-specific assessment produces lower or higher SEI classification than the 'environmental sensitivity' output of the screening tool for that particular site, it is the responsibility of the specialist to provide a clear and defensible justification for the difference. SEI is considered to be a function of the biodiversity importance (BI) of the receptor (e.g. species of conservation concern, the vegetation/fauna community or habitat type present on the site and its resilience to impacts (receptor resilience [RR]) as follows:

$$SEI = BI + RR$$

BI in turn is a function of conservation importance (CI) and the functional integrity (FI) of the receptor as follows:

$$BI = CI + FI$$

Conservation importance (CI) is evaluated in accordance with recognised established internationally acceptable principles and criteria for the determination of biodiversity-related value, including the IUCN Red List of Species, Red List of Ecosystems and Key Biodiversity Areas (KBA; IUCN [2016]).

Conservation importance is defined here as:

"The importance of a site for supporting biodiversity features of conservation concern present, e.g. populations of IUCN threatened and Near Threatened species (CR, EN, VU and NT), Rare species, range-restricted species, globally significant populations of congregatory species, and areas of threatened ecosystem types, through predominantly natural processes."

These criteria are defined as follows:

IUCN threatened and Near Threatened species (CR, EN, VU and NT) are defined as either the global or national assessments of the risk of extinction as evaluated by a dedicated panel of species specialists according to the criteria of the International Union for The Conservation of Nature (www.iucnredlist.org). Where the global and national assessments differ for the same taxon, the national evaluation of status should be used in calculating SEI unless the global assessment is both more recent and of a more threatened category. It is important to note that the specialist is required to have a firm understanding of the IUCN Red List Categories and Criteria (IUCN 2012) in order to appropriately apply these for the evaluation of SEI. This criterion can be assessed using confirmed occurrences of species or the suitability of the habitat to support these species.

¹ South African National Biodiversity Institute (SANBI). 2020. Species Environmental Assessment Guideline. Guidelines for the implementation of the Fauna and Flora Species Protocols for environmental impact assessments in South Africa. South African National Biodiversity Institute, Pretoria. Version 4.1 2026.



Rare species are those included on South Africa's National Red List as Rare or Critically Rare or Extremely Rare. These are highly restricted species that are currently not declining. However, should any development impact on a population of these species they will immediately qualify under one of the IUCN categories of threat.

Range-restricted species – the presence of terrestrial flora, vertebrate and invertebrate fauna with a global population extent of occurrence (EOO) of 10 000 km² or less.

Globally significant populations of congregatory species – a roughly estimated proportion (%) of the global population of a fauna species that congregate for breeding/feeding/hibernation/other reasons.

Significant areas of threatened vegetation types – this is a function of both the area (size) being considered in relation to the total extent of that vegetation type (i.e. proportion) and how threatened (CR, EN, VU) the vegetation types are.

Natural processes – natural unmanaged areas with low levels of ecological disturbance have largely intact natural processes such as pollination, seed dispersal and migration, and thus have greater intrinsic conservation importance than those that are modified through ecological disturbance.

While most of the features that will be included in the CI will be provided by the screening tool, it is important to note that CI is evaluated at a much finer spatial scale and based on fieldwork data collection and comprehensive desktop analyses performed by the specialist during the EA process. As a minimum requirement, CI needs to be determined for each identified habitat within the project footprint/PAOI, but best practice recommendation is that it should be determined for all habitats within the entire PAOI.

Fulfilling criteria to evaluate CI do not rely on a single specific threshold for each of the above defining characteristics but can act in combination or in isolation, providing a more robust evaluation of CI as per table below.

Conservation importance	Fulfilling criteria
Very high	Confirmed or highly likely occurrence of CR, EN, VU or Extremely Rare or Critically Rare species that have a global EOO of < 10 km ² . Any area of natural habitat of a CR ecosystem type or large area (> 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type. Globally significant populations of congregatory species (> 10% of global population).



High	Confirmed or highly likely occurrence of CR, EN, VU species that have a global EOO of > 10 km². IUCN threatened species (CR, EN, VU) must be listed under any criterion other than A, if listed as threatened only under Criterion A, include if there are less than 10 locations or < 10 000 mature individuals remaining. Small area (> 0.01% but < 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type or large area (> 0.1%) of natural habitat of VU ecosystem type. Presence of Rare species. Globally significant populations of congregatory species (> 1% but < 10% of global population).
Medium	Confirmed or highly likely occurrence of populations of NT species, threatened species (CR, EN, VU) listed under Criterion A only and which have more than 10 locations or more than 10 000 mature individuals. Any area of natural habitat of threatened ecosystem type with status of VU. Presence of range-restricted species. > 50% of receptor contains natural habitat with potential to support SCC.
Low	No confirmed or highly likely populations of SCC. No confirmed or highly likely populations of range-restricted species. < 50% of receptor contains natural habitat with limited potential to support SCC.
Very low	No confirmed and highly unlikely populations of SCC. No confirmed and highly unlikely populations of range-restricted species. No natural habitat remaining.

Furthermore, while CI is most likely to be assessed based on data collected during the fieldwork survey, it can also be an assessment of the suitability of the receptor to support populations conforming to the fulfilling criteria. As can be seen from the worked example below, each of these evaluations of the fulfilling criteria demand necessary justification.

Functional integrity (FI) of the receptor (e.g. the vegetation/fauna community or habitat type) is defined here as the receptors' current ability to maintain the structure and functions that define it, compared to its known or predicted state under ideal conditions. Simply stated, FI is:
'A measure of the ecological condition of the impact receptor as determined by its remaining intact and functional area, its connectivity to other natural areas and the degree of current persistent ecological impacts.'



These criteria can be defined as:

- Connectivity to other natural areas – connectivity, which can also be measured conversely as the degree of habitat fragmentation, refers to how connected habitat patches are to each other, which has a significant influence on numerous ecological process, such as migration and dispersal opportunities of biota and therefore genetic exchange between populations. Connectivity to other similar habitats becomes more important as the remaining intact and functional area of a habitat decreases, mainly because population sizes decrease and are therefore at greater risk from ecological perturbations and inbreeding effects. The degree of connectivity between habitat patches varies greatly with the dispersal ability of the taxon or taxon group (e.g. fossorial reptiles) in question.
- Degree of current persistent negative ecological impacts – persistent negative impacts such as uncontrolled spread of alien and invasive flora effectively decreases both the remaining intact area and ecosystem functioning of a particular habitat.
- Remaining intact and functional area – the proportion of the receptor that supports natural habitat with intact ecological processes – small areas are less likely to withstand ecological degradation compared to large areas, and the latter are therefore better able to maintain structure and function allowing for intact ecological processes.

$$SEI = BI + RR$$

BI in turn is a function of conservation importance (CI) and the functional integrity (FI) of the receptor as follows:

CI = **low**. Reason be that the vegetation and habitat has been lost. That no Species of Conservation Concern was mapped. On the edge of urban development and ecological connectivity and functioning compromised by historic agriculture activities, including ploughing. The small area mapped as CBA is degraded and consists of pioneer plants and does not represent the vegetation structure of Saldanha Granite Standveld. Off the mapped CBA area, approximately 800m² consist of degraded vegetation that does not represent Saldanha Granite Standveld Vegetation structure and the rest are disturbed areas. The CBA is contested, in which regard we wish to note that in certain cases, very small fragments of CBA are often outliers from the process of developing the BSP and can be considered as errors which is clear in this site mapped CBA. The rest of the development area was correctly mapped as no CBA or ESA. None of the species listed in the Screening Tool Report were recorded on site. The vegetation does not represent the vegetation structures associated with the Saldanha Granite Strandveld vegetation type.

- FI= **low**. On the edge of urban development and ecological connectivity and functioning compromised by historic agriculture activities, including ploughing. Limited functionality is present on site due to the past disturbances.



$$BI = CI + FI$$

Therefore, using table below, the BI was assessed to be very **low** (CI **low** = and FI = **low**)

Recalling that biodiversity importance (BI) is a function of conservation importance (CI) and the functional integrity (FI) of a receptor, BI can be derived from a simple matrix of CI and FI as per table below.

Biodiversity importance		Conservation importance				
		Very high	High	Medium	Low	Very low
Functional integrity	Very high	Very high	Very high	High	Medium	Low
	High	Very high	High	Medium	Medium	Low
	Medium	High	Medium	Medium	Low	Very low
	Low	Medium	Medium	Low	Low	Very low
	Very low	Medium	Low	Very low	Very low	Very low

Receptor resilience (RR) is defined here as:

'The intrinsic capacity of the receptor to resist major damage from disturbance and/or to recover to its original state with limited or no human intervention.'

The fulfilling criteria to evaluate RR are based on the estimated recovery time required to restore an appreciable portion of functionality to the receptor (refer to table below) and will require justification by the specialist. The specialist needs to bear in mind that resilience will often be linked to a particular disturbance or impact, or even time of year, and needs to be described in relation to these factors. Receptor resilience needs to be evaluated by the specialist and justification for each evaluation must be provided in the report.

Resilience	Fulfilling criteria
Very high	Habitat that can recover rapidly (~ less than 5 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a very high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a very high likelihood of returning to a site once the disturbance or impact has been removed.



High	Habitat that can recover relatively quickly (~ 5–10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed.
Medium	Will recover slowly (~ more than 10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a moderate likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a moderate likelihood of returning to a site once the disturbance or impact has been removed.
Low	Habitat that is unlikely to be able to recover fully after a relatively long period: > 15 years required to restore ~ less than 50% of the original species composition and functionality of the receptor functionality, or species that have a low likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a low likelihood of returning to a site once the disturbance or impact has been removed.
Very low	Habitat that is unable to recover from major impacts, or species that are unlikely to remain at a site even when a disturbance or impact is occurring, or species that are unlikely to return to a site once the disturbance or impact has been removed.

The receptor resilience should be an assessment of whether the ecosystem in its current condition is resilient to disturbance and not the resilience of the original ecosystem to past disturbances unrelated to the proposed development.

The RR = **high**. Reason be that it habitat representing Saldanha Granite Strandveld was lost and the habitat is unlikely to be able to recover. In this regard both the historical ploughed areas not mapped as CBA or ESA as well as the small mapped CBA are ecosystems which are present as a result of high levels of historical disturbance and are therefore both highly resilient ecosystems. The resilience should therefore be rated as high or very high with a resultant SEI of very low. We further wish to recommend that the impact ratings should be re-evaluated after a reassessment of the SEI and the need for a biodiversity offset verified accordingly.

$$\text{SEI (very low)} = \text{BI (low)} + \text{RR (high)}$$



Site ecological importance		Biodiversity importance				
		Very high	High	Medium	Low	Very low
Receptor resilience	Very low	Very high	Very high	High	Medium	Low
	Low	Very high	Very high	High	Medium	Very low
	Medium	Very high	High	Medium	Low	Very low
	High	High	Medium	Low	Very low	Very low
	Very high	Medium	Low	Very low	Very low	Very low

Guidelines for interpreting SEI in the context of the proposed development activities.

Site ecological importance	Interpretation in relation to proposed development activities
Very high	Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e. last remaining populations of species, last remaining good condition patches of ecosystems/ unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains.
High	Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted; limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
Medium	Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.
Low	Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.
Very low	Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.

The PAOI mapped for this area in the screen toll report was very high. The assess Site Ecological importance is **very low**, which is confirmed by the fact that the area was not mapped CBA or ESA, except for the small incorrectly mapped area.

As can be noted from the photograph and historical images, the area was heavily impacted in the past and the vegetation structures compromised in such an extent that the vegetation recorded during the site survey consists mostly of pioneer plants such *Aizoon paniculatum* (LC), *Oncosiphon suffruticosum* (LC), *Bromus pectinatus* (LC), *Lycium tetrandrum* (LC), *Lycium ferocissimum* (LC), *Trachyandra divaricate* (LC), *Leysera gnaphalodes* (LC), *Carpobrotus quadrifidus* (LC), *Osteospermum incanum subsp. incanum* (LC), *Lapeirousia*



anceps (LC), *Ruschia macowanii* (LC) (definitely not *Ruschia langebaanensis* determined from the time of flowering. *Ruschia langebaanensis* flowers from May to July and *Ruschia macowanii* from September to November), *Hermannia scabra* (LC), *Lycium tetrandrum* (LC), *Othonna cylindrica*, *Moraea minor*, *Hermannia humifusa*, *Euphorbia burmannii* (LC), *Senecio sarcoides*, *Felicia tenella* (LC), *Dimorphoheca pluvialis* (LC), and *Drosanthemum floribundum* (LC).

Saldanha Granite Strandveld vegetation can be described as rounded granite sheets interspersed with low - medium shrubland, some succulent, grassy and herb-rich spots with many geophytic flora which is typically of the view in this photograph taken on erf 474, St Helena Bay.



Photograph 1: Typical vegetation structure of Saldanha Granite Strandveld. The elevated high represent pristine vegetation, while the lower section in bottom of the photograph represent previously ploughed and degraded Saldanha Granite Strandveld.



Photograph 2: Ecological condition of the vegetation structure representing the area not mapped as a CBA or ESA. As can be seen from the photograph, area dominated by pioneer plants.



Photograph 3: Ecological condition of the vegetation structure representing the area mapped as a CBA or ESA. As can be seen from the photograph, area dominated by pioneer plants.

None of the plant species listed in the screen tool report. As per the best practise guideline that accompanies the Animal and Plant Species Protocol for the screening tool, please, remember that the name of the sensitive species may not appear in the final EIA report nor any of the specialist reports released into the public domain. It should be referred to as sensitive plant or sensitive animal and its threat status may be included, e.g. critically endangered sensitive plant or endangered sensitive animal. This compliance statement report presents the findings of the plant species verification and site survey that was conducted by Nicolaas Hanekom.

The information gathered from the site sensitivity verification does differs from the Environmental Screen report classification of medium sensitivity applicable to the mapped CBA only. The rest of the site was correctly mapped as low sensitivity in the screen tool report. The development of the site would have a **Low Negative** impact with no mitigations required.



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

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.

1.2. Scope and Objectives

The protocol² provides the criteria for the reporting of requirements for the assessment and reporting of impacts on plant 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 “medium sensitivity” for plant species on the national web based environmental screening tool. According to the protocols, where Species of Conservation Concern (“SCC”) are found on site or have been confirmed to be likely present, a **Plant Species Specialist Assessment** must be submitted in accordance with the requirements specified for “very high” and “high” sensitivity in this protocol. Similarly, where no SCC are found on site during the investigation or if the presence is confirmed to be unlikely, a **Plant Species Compliance Statement** must be submitted. Since there were no SCC found or likely to occur on site during the field survey, a **Plant Species Compliance Statement** was conducted.

1.3. Terms of Reference

The Plant Species Compliance Statement, must be prepared by a suitably qualified specialist in the field of Botanical Science or Ecological Science, on the site being submitted as the

² Published in Government Notice No. 1150. GOVERNMENT GAZETTE 43855 30 OCTOBER 2020. This gazette is also available free online at www.gpwonline.co.za



preferred development site and must verify:

- That the site is of “low” sensitivity for plant 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 National Vegetation Map of South Africa (2018) identifies the remnants of natural vegetation occurring within the area as Saldanha Granite Strandveld, critically endangered (CN).

The site visit was carried 17 September 2024. The peak flowering time in this region is spring, which occurs from August to October. The survey was done in the optimal period, the information gathered was sufficient to do the assessment due to the transformed nature of the site.

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, utilizing various sources including the South African National Biodiversity Institute (“SANBI”) data and other relevant sources. 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 will be 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 study area was surveyed on foot, and all indigenous species growing in the greater study area were noted. Particular attention was paid to potential fauna and flora Species of Conservation Concern that could have been present. Various photographs were taken.

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

Undertake construction activities only in identified and specifically demarcated areas.

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

No assumptions were made and no uncertainty or gaps in knowledge or data is noted.

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

Standard methods of evaluation were used. A hand-held Garmin ® GPSMap 64s was used to record 'sample' waypoints and the 'sample track'. At the 'sample waypoints' specific details of the surrounding vegetation and features of habitat were recorded, and photographs taken to support the general observations made on the site. Due to the size of the development and linear nature the surveys were focus on a line transect and relevant data were recorded on the line transact. The line transect survey methodology was regarded as the best survey sample technique for this site. A total of approximately 3.7km was covered during the survey as per the photographs below. Only photos of relevance were taken and include as proof below. A total of 3 hours were spent on site and area for further observation purposes.



Info



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September

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Add a description



Saldanha Bay



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Zoom selection



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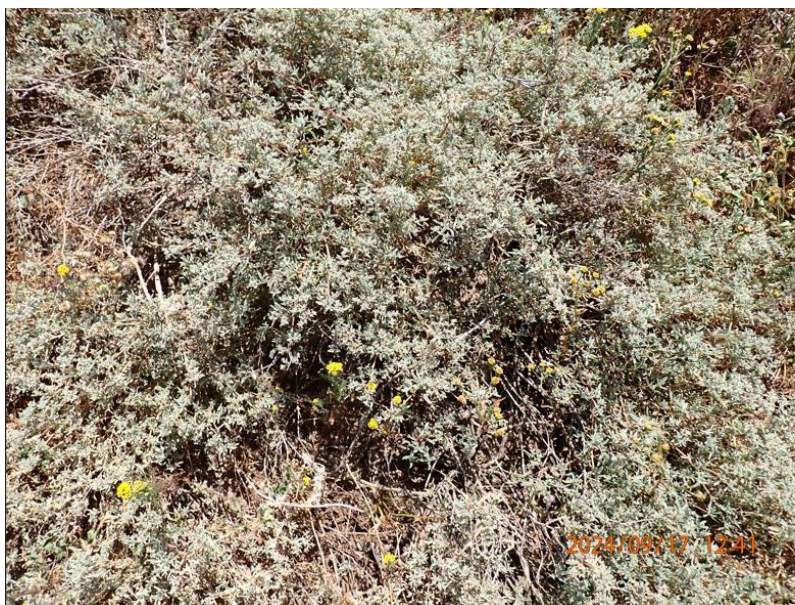
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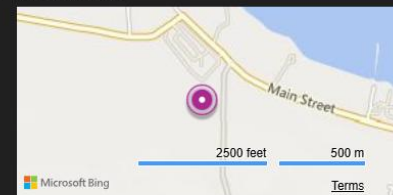
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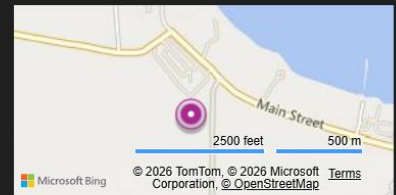
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Zoom selection



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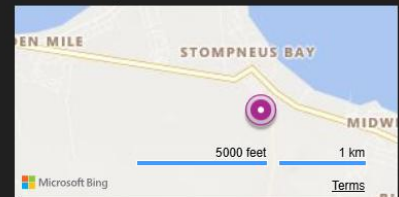
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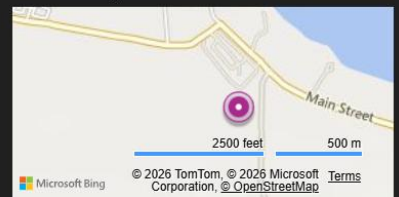
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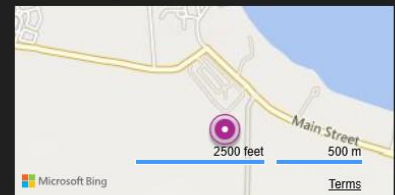
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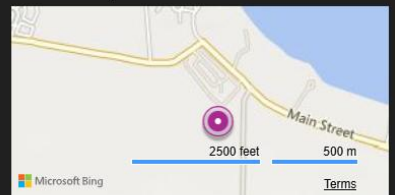
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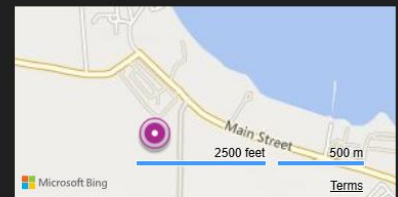
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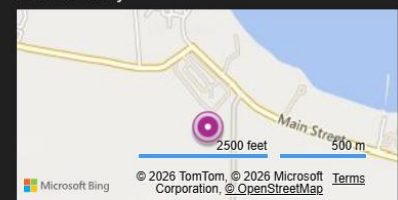
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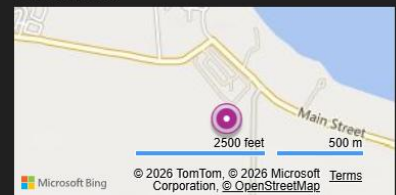
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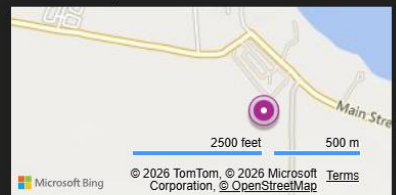
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Saldanha Bay





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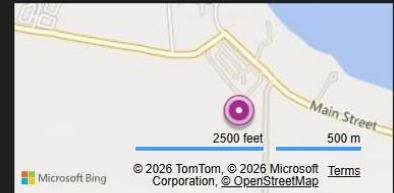
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Saldanha Bay



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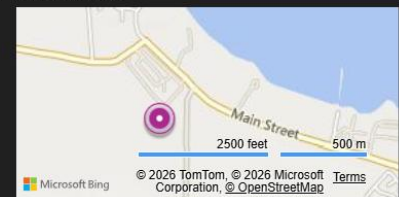
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Saldanha Bay





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 Saldanha Bay





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 Saldanha Bay





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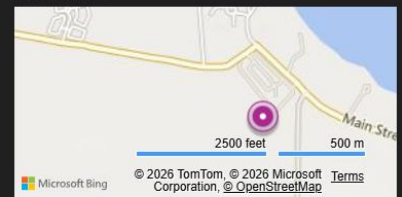
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Saldanha Bay



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September

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Add a description



Saldanha Bay





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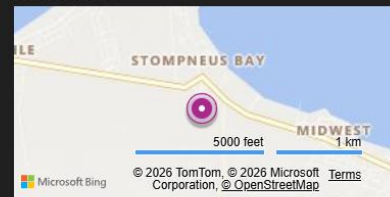
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Saldanha Bay



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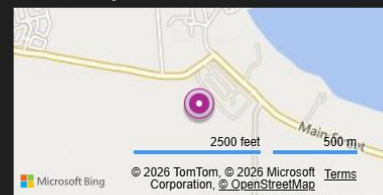
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Saldanha Bay





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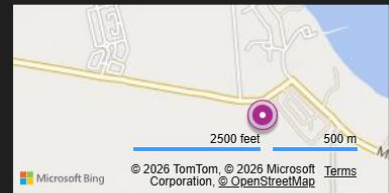
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West Coast



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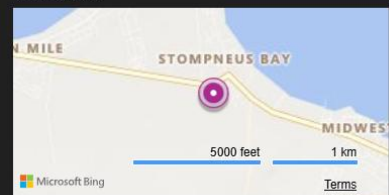
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September 17 2024

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West Coast





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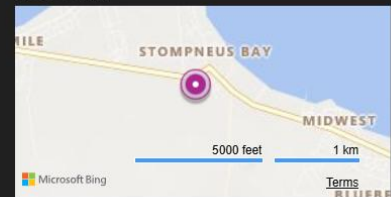
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West Coast



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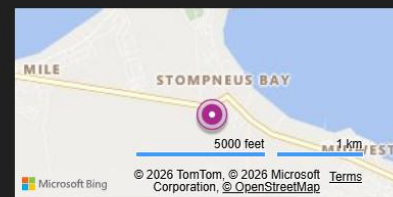
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West Coast





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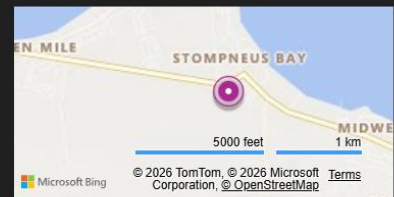
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West Coast



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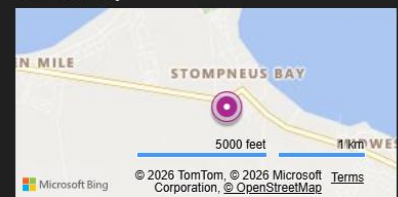
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Saldanha Bay





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Saldanha Bay



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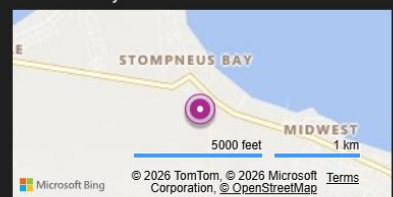
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Add a description



Saldanha Bay





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Saldanha Bay



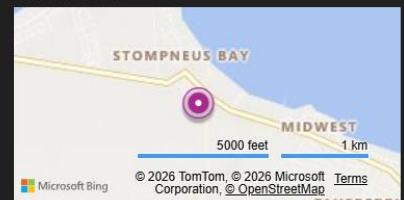
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Saldanha Bay



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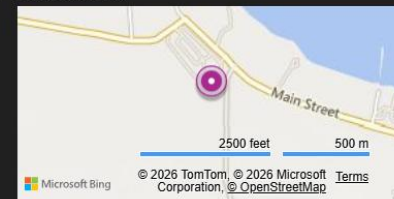
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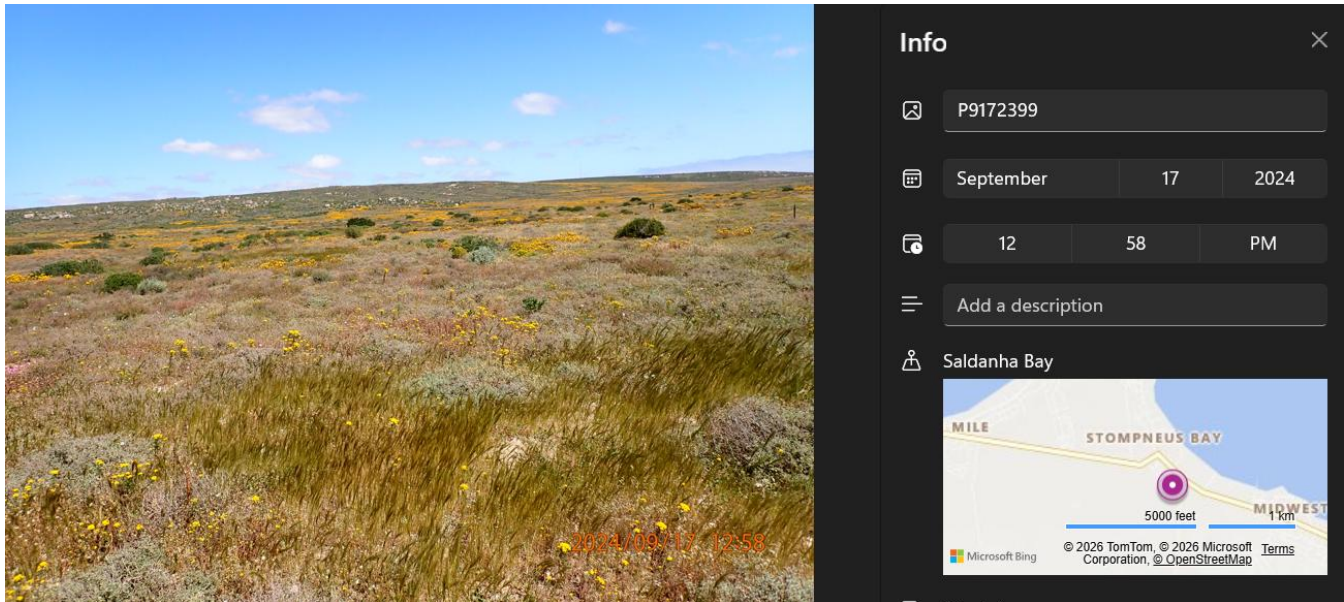


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Saldanha Bay





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

Brownlie, S. 2005. Guideline for Involving Biodiversity Specialists in EIA Processes: Edition 1. CSIR Report No ENV-S-C 2005 053 C. Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town. 63 pp.

The revised list published in Government Gazette 47526 (Notice No.689) on 18 November 2022 in terms of the National Environmental Management: Biodiversity Act (NEMBA).

Department of Water Affairs and Forestry (DWAF). 2008. Updated Manual for the Identification and Delineation of Wetlands and Riparian Areas.



Driver, Nel, Snaddon, Murray, Roux, Hill (2011). Implementation Manual for Freshwater Ecosystem Priority Areas. Draft Report for the Water Research Commission.

Driver A., Cowling R.M., & Maze K. 2003. Planning for living landscapes: perspectives and lessons from South Africa. Center for Applied Biodiversity Science at Conservation International, Washington DC; Botanical Society of South Africa, Cape Town.

IUCN Red List www.iucnredlist.org.

Helme N. & D. Raimondo. In prep. Contribution to the updated Red Data Book list of threatened plants of South Africa.

Miller J.R. 2005. Biodiversity conservation and the extinction of experience. Trends in Ecology and Evolution. 20(8): 430-434.

Mucina L & Rutherford M.C. (eds.) 2006. Vegetation Map of South Africa, Lesotho and Swaziland: Shapefiles of basic mapping units.

Mucina, L. and M. Rutherford. *Eds.* 2012 update. Vegetation map of South Africa, Lesotho, and Swaziland. *Strelitzia* 19. South African National Biodiversity Institute, Pretoria.

Raimondo, D., Von Staden, L., Foden, W., Victor, J.E., Helme, N.A., Turner, R.C., Kamundi, D.A., and Manyama, P.A. (eds.) 2009 and online updates at redlist.sanbi.org. Red List of South African Plants 2009. *Strelitzia* 25. South African National Biodiversity Institute, Pretoria.

CapeNature (2024). 2023 Western Cape Biodiversity Spatial Plan and Guidelines. Biodiversity Capabilities, CapeNature. Link: <https://www.capenature.co.za/western-cape-biodiversity-spatial-plan>.



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 qualified Environmental Assessment Practitioner ("EAP") who holds a Masters Technologiae, Nature Conservation ("Vegetation Ecology and Biodiversity Assessment") degree from the Cape Peninsula University of Technology. Nicolaas is certified in terms of section 20(3)(a) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003), as a Professional Natural Scientist Ecological Science (Pri.Sci.Nat); Aquatic Science & Conservation Science (Cand.Sci.Nat), Registration Number: 004415. He further qualified in Environmental Management Systems ISO 14001:2004, at the Centre for Environmental Management, North-West University, as well as Environmental Management Systems ISO 14001:2004 Audit: Internal Auditors Course to ISO 19011:2003 level, from the Centre for Environmental Management, North-West University qualifying him to execute audits to ISO/SANS environmental compliance and EMS standards.

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:	• 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	• 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) • 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)
Professional membership, accreditations and courses	• 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).
Summary of experience	1992: South African National Parks. Student at Bontebok National Park with management and monitoring actions related to the Breede River. 1993 -1998: Free State Nature Conservation. Ecological management and monitoring actions related to the Gariep Dam, Orange and Caledon Rivers. 1998 -2006: CapeNature. Ecological management and monitoring actions related to the Berg River Estuary, Verlorenvlei, Lamberts bay’s Jackalsvlei, Wadrikt 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. 2006 to date: Cape Lowland Environmental Services, Eco Impact Legal Consultant and Enviro-EAP. Ecological (Freshwater and aquatic) Specialist input, assessment, monitoring and reports.
Publications and assessment reports	Just to name a few. Was involved in many Ecological Assessments, monitoring and inputs in EIA applications. - Elandskloof Farm 475 Citrusdal Biodiversity Baseline Survey. August 2010. This Biodiversity Assessment Covering Terrestrial 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 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 and aquatic ecological assessments and water use authorization applications) - Witteklip Erf 123 Extension, Vredenburg. Biodiversity Baseline Survey. Updated - October 2012 (Included Terrestrial 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).
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CERTIFICATION

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