

**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**

**Terrestrial Biodiversity & Terrestrial Animal Species  
Compliance Statement**

Compiled for



By



**Cossypha**  
Ecological

September 2022

## REPORT PRODUCTION

Specialist	Role	Project Component	Qualifications and Professional Registration
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Refer to **Appendix A** for an abridged CV of the specialist.

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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.Sci.Nat.*  
Terrestrial Ecologist  
SACNASP Reg. No. 400401/12

19 September 2022

Date

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## ABBREVIATIONS

BA	Basic Assessment
CBA	Critical Biodiversity Area
DEA	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
RLE	Red List of Ecosystems
SANBI	South African National Biodiversity Institute
SCC	Species of Conservation Concern
SWSA	Strategic Water Source Area
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 amendment of an Environmental Authorisation (EA) in terms of Part 2 of Chapter 5 of the Environmental Impact Assessment Regulations, 2014 (i.e., Regulation 31) for the Hartenbos Landgoed Phase 2 residential development on a portion of the Farm Vaale Valley 219, at Hartenbos near Mossel Bay. 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 Terrestrial Biodiversity and Animal Species Assessment / Compliance Statements for the proposed project. Cossypha Ecological was appointed to undertake the specialist study for the site in question.

## 2. PROJECT DESCRIPTION

An EA was granted in 2009 for the development of the Hartenbos Landgoed Phase 2 residential area consisting of:

- 1265 residential erven (zoned Residential I)
- Five townhouse erven (zoned Residential III that includes 150 social housing units, a multipurpose community centre and a  $\pm 300 \text{ m}^2$  split zoned Business II site located on Ptn. 1302)
- An open space network and recreation area (zoned Open Space II) and a  $\pm 3\,500 \text{ m}^2$  split zoned Business II site located on Ptn. 1306
- A road network and associated infrastructure services
- The remainder of the property will be managed as a nature reserve

The applicant proposes to amend the current layout to the proposed layout as seen in **Figure 1**. The proposed amendments will not increase the total footprint of the development, only re-align internal roads and the density of the houses. Additionally, as part of the initial authorisation the municipality negotiated with the developer to accommodate 150 social housing units, community hall and split zoned business. It is however understood that the residents of Power Town (the beneficiaries for the social housing do not wish to relocate and as such the social housing aspect has become redundant). A new agreement with the Mossel Bay Municipality has been reached and is being implemented in line with the municipal densification policy. This area will now be used for a sports field and school. A new southwestern road is proposed which has also resulted in the re-alignment of roads in the southwestern section of the site.

According to the department of (DEADP) only the potential impacts associated with the proposed changes need to be assessed (see **Figure 2**). Additionally, part of the amendment is to move away from the fine scale layout of the current layout, whereby each erf and house location is represented to that of the zoned layout of the proposed layout. The need for this arises from a changing municipal policy whereby they do not want to approve the planning of such large development layouts far in advance as needs change over time and therefore they would like to approve the building plans of each proposed phase just before they are developed. Therefore, the risks and impacts of approving the phased layout also need to be assessed. In other words what will the risks and impacts be if the layout is approved in such a way that the developer has more freedom to adjust the internal layouts to market related needs.



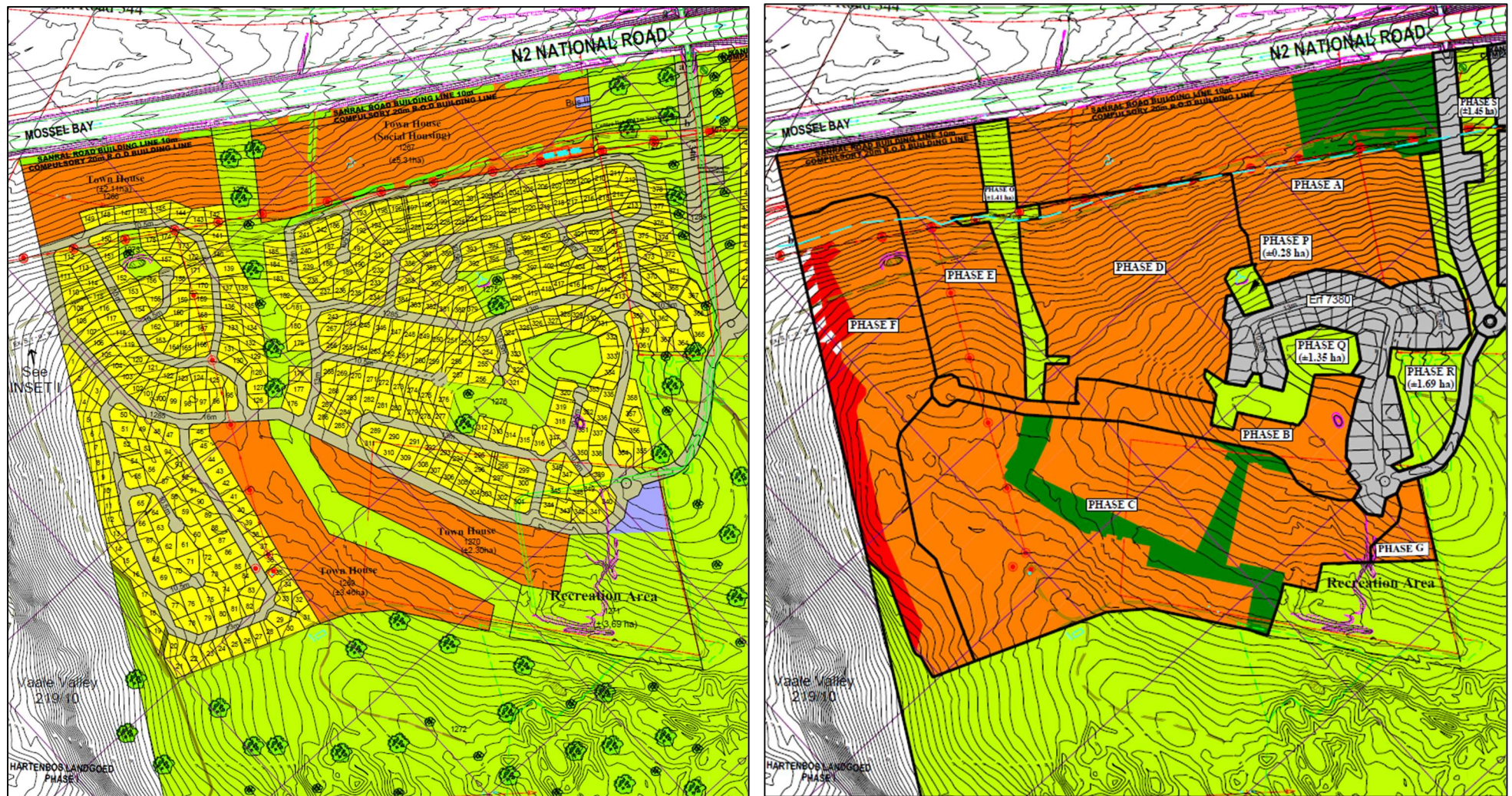


Figure 1: Proposed changes to the development layout (right) compared to the existing layout (left)



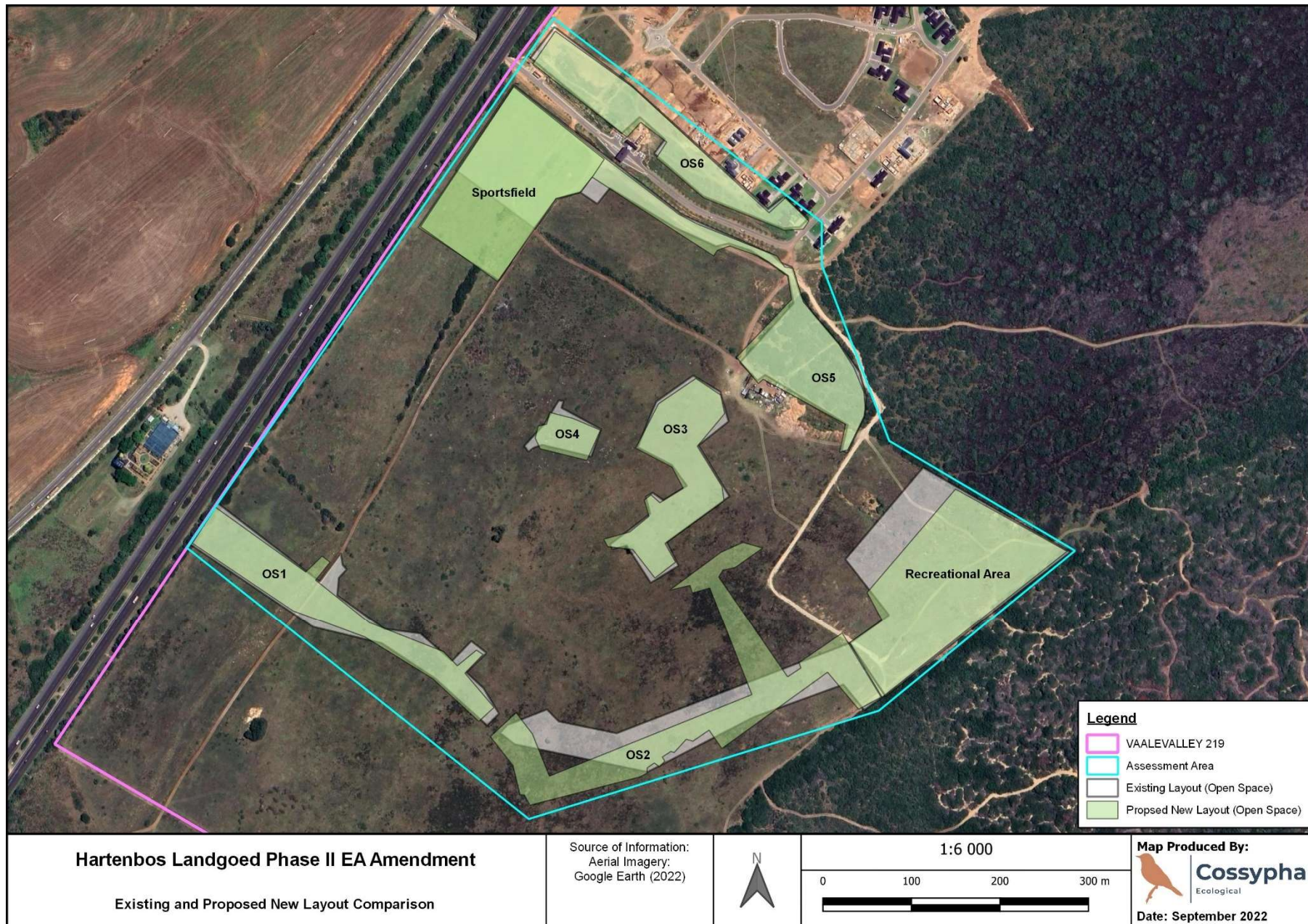


Figure 2: Layout comparison



### 3. THE STUDY AREA

#### 3.1 LOCATION

The site is located along the coastline just north of the town of Hartenbos, approximately 9 km due north of Mossel Bay, within the Mossel Bay Local Municipality, Garden Route District, West Cape Province (**Figure 3**). The site falls within Quarter Degree Grid Cell (QDGC) 3422AA and lies between 34°05'58.75" and 34°06'27.78" south and 22°06'51.48" and 22°07'30.48" east. The site is gently undulating ranging in altitude from 23 m to 68 m above mean sea level (a.m.s.l.). The assessment area is approximately 47.5 ha in extent.

#### 3.2 LAND USES OF THE SITE AND SURROUNDING AREAS

The site is situated near the coastline within a semi-rural landscape just north of the Hartenbos Estuary. The site is bordered by indigenous dune thicket vegetation to the south and east, beyond which is the beach and the Hartenbos River Estuary. The construction site and existing phase of the Hartenbos Landgoed Housing Estate occurs to the north of the assessment area. The Klein Brak Estuary occurs ~2 km to the north. The site is bordered on the west side by the N2 highway and the R102 regional road, beyond which lies cultivated fields (**Figure 4**). The assessment area (and the entire Hartenbos Landgoed Phase II development) occurs on a portion of Vaale Valley 219 that has been cleared of the original dune vegetation for agricultural purposes since prior to 1985. The site is a vacant portion of land with no current anthropogenic land use and is comprised of secondary grassland with scattered shrubs and alien trees.

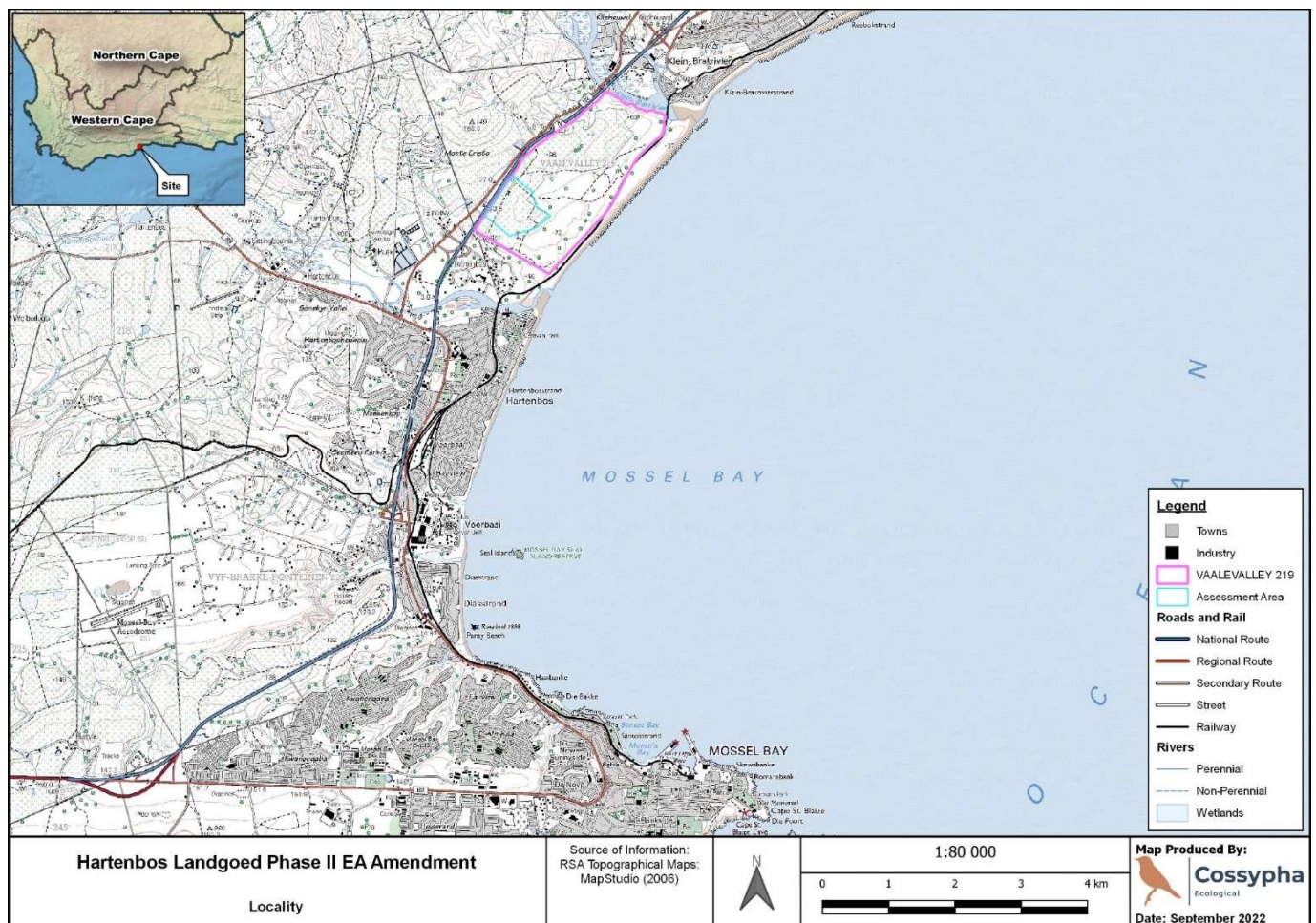


Figure 3: Locality of the study area



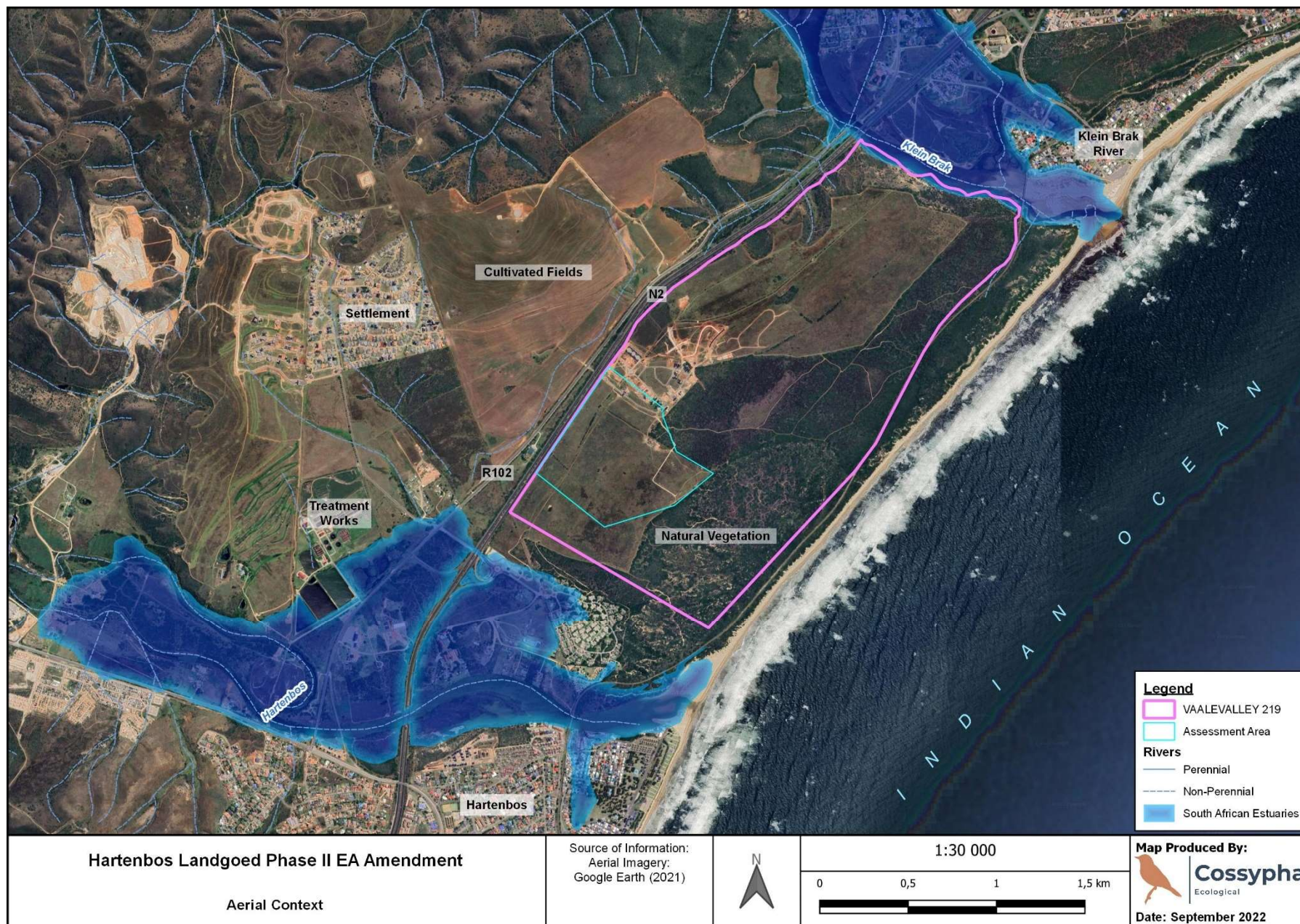


Figure 4: Aerial overview of the study area and surrounds

## 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 the National Environmental Management Act (Act 107 of 1998) (NEMA), was generated for the project using the National Web-Based Environmental Screening Tool on 04/08/2022. The report identified to small portions 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: Martial Eagle *Polemaetus bellicosus* (EN)
- Aves: Denham's Bustard *Neotis denhami* (VU)
- Aves: Knysna Warbler *Bradypterus sylvaticus* (Vulnerable (VU))

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

- Insecta: Red Copper *Aloeides thyra orientis* (EN)
- Insecta: Trimen's Copper *Aloeides trimeni southeyae* (EN)
- Insecta: Coastal nimble Blue *Lepidochrysops littoralis* (EN)
- Invertebrate: Yellow-winged Agile Grasshopper *Aneuryphymus montanus* (VU)
- Sensitive Species<sup>1</sup> 5 (VU sensitive mammal)
- Sensitive Species 8 (VU sensitive mammal)

In addition, while the report identified the majority of the site as **Low** sensitivity for the Terrestrial Biodiversity theme, the northern portion of the study area was identified as **Very High** sensitivity due to this section falling within the following sensitive landscape biodiversity features:

- Endangered Ecosystem
- Critical Biodiversity Area (CBA) 1
- Ecological Support Area (ESA) 1

Therefore, a terrestrial biodiversity assessment and a faunal assessment are 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 protocols. These protocols replace 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; and
- Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, published in GN 320 of 20 March 2020.

### 4.1 SITE SENSITIVITY VERIFICATION

According to the above-mentioned protocols, 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

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<sup>1</sup> 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.



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 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 6<sup>th</sup> and 7<sup>th</sup> of September 2022 where the site was inspected on foot. The season was early spring and was deemed the appropriate time of year for the field survey. The site inspection revealed that the assessment area was in a relatively disturbed state and comprised of secondary vegetation. No animal SCC were observed on the site. This confirmed the ecological sensitivity for terrestrial biodiversity and fauna to be low (see further explanation in **Sections 5.2 and 6**). 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 Fauna and Terrestrial Flora Species Protocols (SANBI, 2020). Similarly due to the disturbed nature of the site, a Terrestrial Biodiversity Compliance Statement written in accordance with the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity (GN 320 of 2020), is included in this report.

## 4.2 TERMS OF REFERENCE

The terms of reference for the assessments were as follows:

- Undertake a desktop assessment and field survey of the site to inform the assessment;
- Verify the site sensitivity for terrestrial biodiversity and faunal 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;
- Compilation of a Terrestrial Biodiversity Assessment or Compliance Statement according to the relevant protocol; 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), Protected Areas Database 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 6<sup>th</sup> and 7<sup>th</sup> of September 2022 when terrestrial biodiversity and faunal elements within the study area were assessed. Daytime surveys were conducted on foot by meandering through the assessment area. Changes in land cover, habitat, and vegetation were observed and any 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 5**). A total of 24 sample points were photographed and are described in the results section below. Coverage of the study area was deemed to be sufficient. Note that no sampling was conducted in the adjacent indigenous dune thicket vegetation.

During the field survey the following aspects pertaining to terrestrial biodiversity and 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 two days during one season (early spring) and it is not considered necessary to perform an additional survey.
- No sampling was conducted in the adjacent indigenous dune thicket vegetation.
- The survey was conducted over approximately six 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.

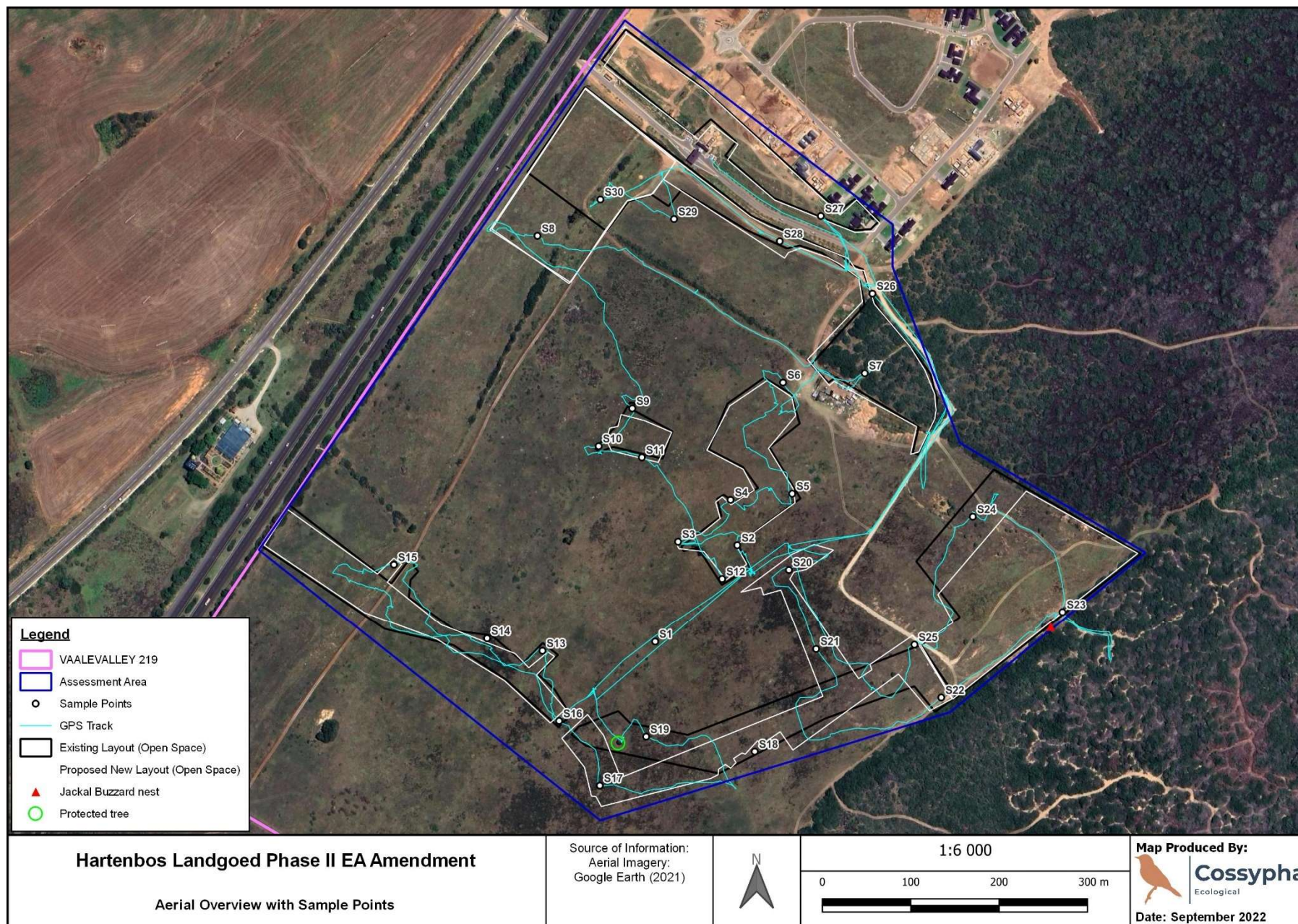


Figure 5: Aerial view of the site with GPS track and location of sample points



## 6. DESKTOP ASSESSMENT RESULTS

### 6.1 TERRESTRIAL BIODIVERSITY

#### 6.1.1 REGIONAL VEGETATION

The study area is located within the Fynbos Biome, within the Eastern Fynbos-Renosterveld Bioregion. The site falls mostly within the Hartenbos Dune Thicket vegetation type, with the south-western section of the site falling within Canca Limestone Fynbos, and the north-western section falling within Mossel Bay Shale Renosterveld. Hartenbos Dune Thicket is currently classified as Endangered with 79% remaining (Mucina and Rutherford, 2006; SANBI, 2021). With a conservation target of 19%, only 5.7% of this vegetation type is conserved in statutory conservation areas and is therefore regarded as Poorly Protected (SANBI, 2021). Canca Limestone Fynbos is currently classified as Least Concern, while Mossel Bay Shale Renosterveld is currently classified as Critically Endangered with only 38% remaining, none of which is currently protected (SANBI, 2021).

#### 6.1.2 FAUNA AND FLORA

Hartenbos Dune Thicket vegetation occurs on flat to moderately undulating coastal dunes. Structurally, the vegetation is mosaic of low thicket, occurring in small bush clumps dominated by small trees and woody shrubs, in a mosaic of low asteraceous fynbos. Thicket clumps are best developed in fire-protected dune slacks, and the fynbos shrubland occurs on upper dune slopes and crests. Succulent karroid elements (*Aloe ferox*, *A. arborescens*, *Eriocephalus africanus*) occur along bands of mudstone and shale (Grobler *et al.*, 2018). Plant species characteristic of the vegetation type include small trees such as *Pterocelastrus tricuspidatus*, and *Sideroxylon inerme*; succulent shrubs such as *Carpobrotus acinaciformis*, and *Roepera morganiana*; low shrubs such as *Salvia africana-lutea*, and *Agathosma apiculata*; graminoids such as *Restio eleocharis*, *Stenotaphrum secundatum*, *Thamnochortus insignis*, and *Themeda triandra*; and tall shrubs such as *Euclea racemosa*, *Maytenus procumbens*, *Metalasia muricata*, *Olea exasperata*, *Osteospermum moniliferum*, *Passerina rigida*, and *Searsia crenata* (Grobler *et al.*, 2018). According to Wessels (2008) and Coetzee (2005) who conducted the original vegetation assessments on the site, the vegetation has been almost totally transformed, has a low level of plant species diversity, and has no SCC. The site has also lost its inherent ecological functioning, have a low conservation value, and the potential for rehabilitation is very low.

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 THREATENED TERRESTRIAL ECOSYSTEMS

According to the National List of Threatened Terrestrial Ecosystems (DEA, 2011), published in terms of Section 52 of the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA), the northern section of the site is located within Groot Brak Dune Strandveld, which is listed as an **Endangered** Ecosystem in terms of Section 52 of NEMBA (DEA, 2011) under criterion A1: Irreversible loss of natural habitat. Six Red Data plant species falling in the categories Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) occur in the ecosystem.

According to the newly updated list of threatened ecosystems based on the 2018 National Biodiversity Assessment (NBA; Skowno *et al.*, 2019), the majority of the site falls within the Hartenbos Dune Thicket and Canca Limestone Fynbos ecosystems. Both were assessed to be Least concern. The north-western section of the site falls within Mossel Bay Shale Renosterveld, which has been assessed to be **Critically Endangered** under criterion B1(i) due to the vegetation type being narrowly distributed with high rates of habitat loss in the past 28 years (from 1990 to 2018) placing the ecosystem at risk of collapse (remaining extent > 38%) (SANBI, 2021). While the NEMBA list currently remains the official legislated National List of Ecosystems that are Threatened and in Need of Protection, gazetted in 2011 (DEA, 2011), the new list updated with the IUCN Red List of Ecosystems (RLE) assessment approach, will be gazetted soon (SANBI, 2021).

The vegetation assessments conducted by Wessels (2008) and Coetzee (2005) concluded that none of the original vegetation exists on the site and the potential for rehabilitation is very low.

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#### 6.1.4 WESTERN CAPE BIODIVERSITY SECTOR PLAN

According to the Western Cape Biodiversity Sector Plan (WCBSP), the majority of the site is not assigned to a biodiversity category due to the transformed nature of the site. The edges of the extreme eastern corner of the site that border the indigenous dune vegetation are classified as Critical Biodiversity Area (CBA) 1 Terrestrial, with a small portion classified as CBA1: Wetland. No indigenous vegetation will however be affected by the proposed development. A few patches of the site are classified as Other Natural Area (ONA) and Ecological Support Area (ESA) 1: Terrestrial (Pool-Stanvliet *et al.*, 2017). Such areas appear to be represented by small patches and strips of remnant indigenous vegetation present on the site (**Figure 6**).

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#### 6.1.5 PROTECTED AREAS

In terms of Protected Areas (PA), the site falls within the Gouritz Cluster Biosphere Reserve and falls 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).

Another PA occurring in the vicinity includes the Mossel Bay Seal Island Provincial Nature Reserve situated ~5 km to the south of the site. No other PAs occur near the site.

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#### 6.1.6 NATIONAL FRESHWATER ECOSYSTEM PRIORITY AREAS

From a National Freshwater Ecosystem Priority Areas (NFEPA) perspective, the site falls within the Gouritz National Water Management Area (WMA) and within the Coastal Gouritz Sub-WMA. Major rivers that flow in the vicinity include the Hartenbos River and Estuary immediately to the south of the site and the Klein Brak River and Estuary ~2 km to the north of the site. Other NFEPA features that occur in the vicinity of the site include a few natural wetlands that occur within the indigenous dune vegetation to the south of the site (Nel *et al.*, 2011). No wetlands or drainage lines fall within the boundaries of the site and the site does not fall with a Strategic Water Source Area (SWSA) (Nel *et al.*, 2011).



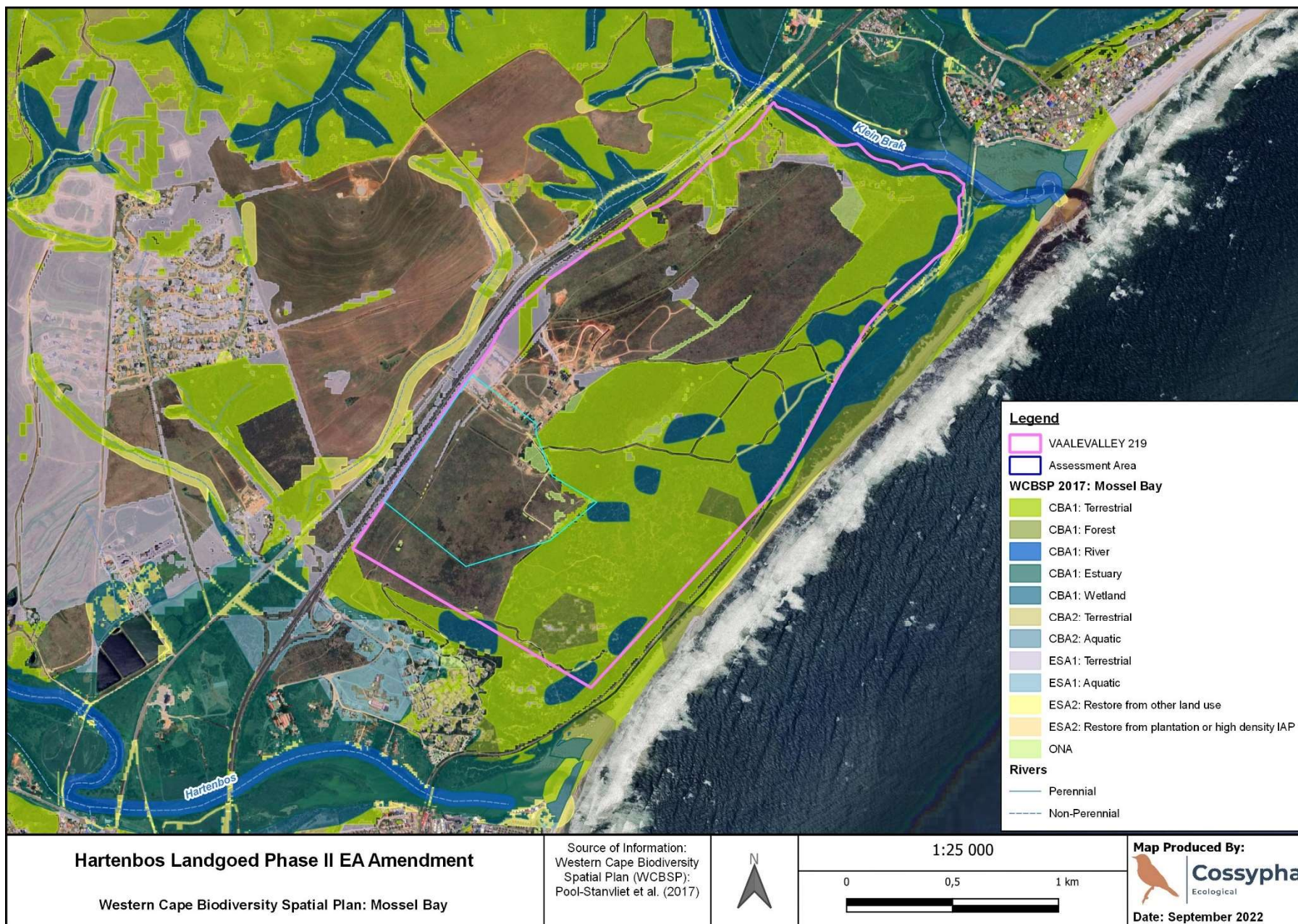
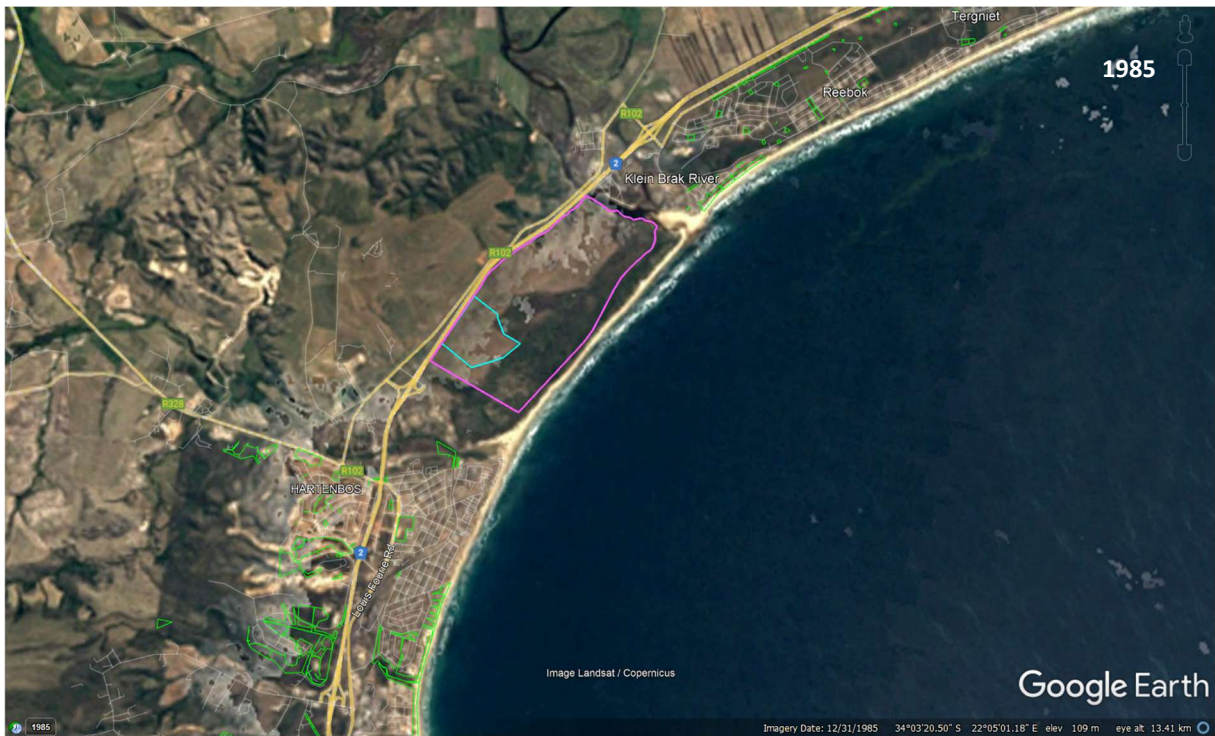


Figure 6: The study area in relation to the WCBSP

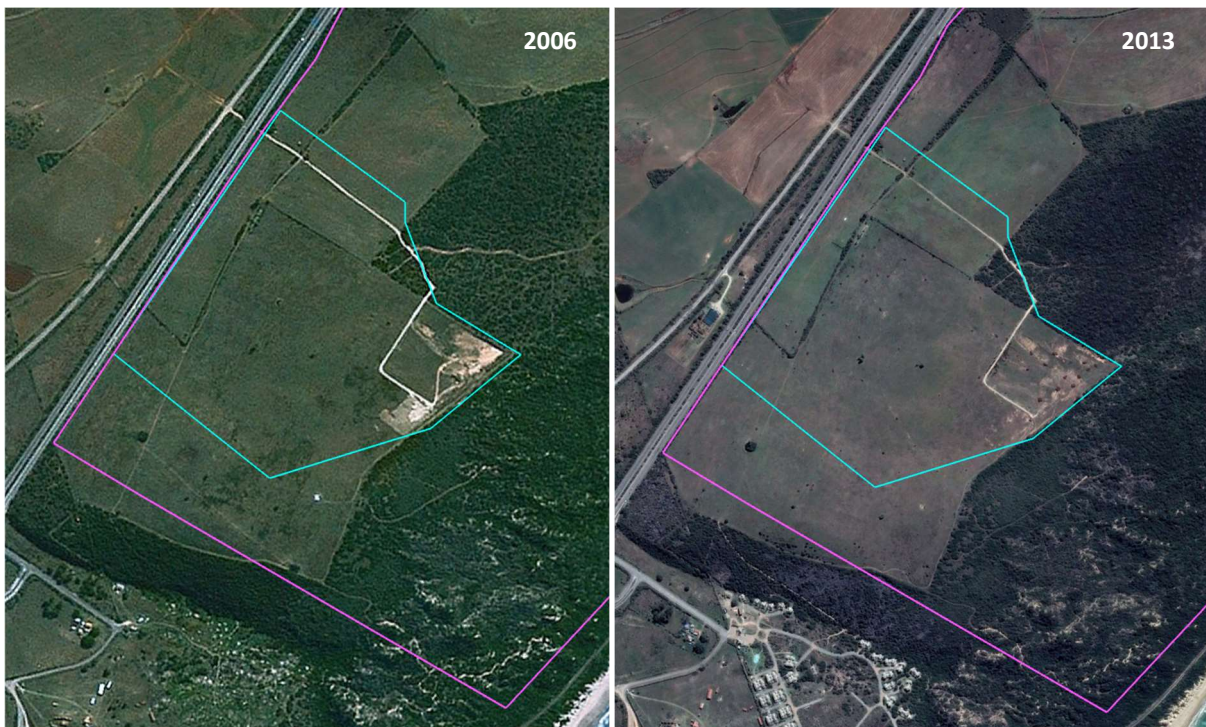


## 6.2 HISTORICAL LAND USE OF THE STUDY AREA

Historical satellite imagery from 1985 (Google Earth ©) shows that the site was cleared of the original vegetation and used for agricultural purposes such as cultivation or pasture lands (see images below). The pink outline represents the land portion Vaale Valley 219, and the light blue outline refers to the assessment area. Subsequent satellite imagery (2005 – 2022) shows that the site has remained clear of the dune vegetation and has undergone various disturbances such as .

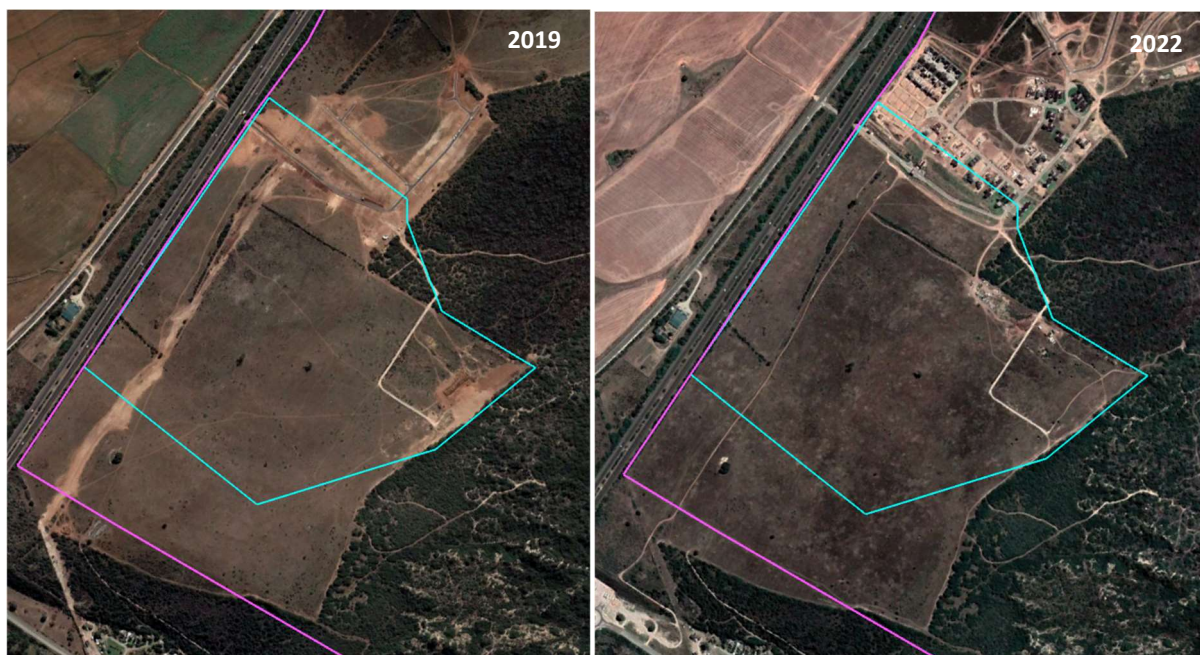


Historical satellite imagery from 1985 showing the site cleared of original vegetation



The site remained clear of dune vegetation in 2006 and 2013, with various disturbances in the eastern corner





2019 and 2022 showing the development progress with vegetation in the assessment area remaining unchanged

## 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 assessment area is mostly comprised of secondary grassland vegetation, scattered with common indigenous and alien shrubs and trees. Indigenous species observed included common grasses and restios such as *Restio eleocharis*, and common shrubs such as *Carpobrotus acinaciformis*, *Aloe sp.*, *Roepera morganiana*, *Osteospermum moniliferum*, and *Searsia crenata*. Alien species included *Opuntia ficus-indica*, *Acacia sp.*, and *Eucalyptus sp.* One individual *Mimusops caffra*, a protected tree species in SA, was also recorded on the site.



The site (looking south) covered with secondary grassland, scattered shrubs, and a few alien trees









Faunal activity on the site was generally low with only common or generalist birds, small mammals, and butterflies recorded. Some of the bird species recorded on the site included Cape Spurfowl *Pternistis capensis*, Spotted Thick-knee *Burhinus capensis*, Barn Swallow *Hirundo rustica*, Karoo Prinia *Prinia maculosa*, Bokmakierie *Telophorus zeylonus*, Common Starling *Sturnus vulgaris*, and a pair of Jackal Buzzard *Buteo rufofuscus* that are known to nest in an alien tree on the southern border of the site (on the fringe of the indigenous dune thicket). Mammal diversity on the site was low with only small mammals such as Four-striped Grass Mouse *Rhabdomys pumilio* and Cape Gerbil *Gerbilliscus afra* recorded, with a high concentration of burrows observed throughout the site. Spoor of Small-spotted Genet *Genetta genetta* was observed on the edge of the dune thicket in the southern portion of the site. Only one common butterfly species was recorded during the field survey, Silver-bottom Brown *Pseudonympha magus*. No faunal SCC were recorded during the site surveys. The habitat on the site is largely homogenous and generally of poor quality and is unlikely that the available habitat would support any significant populations of faunal SCC.



Some of the common fauna recorded on site includes: (from top left to bottom right) Cape Spurfowl, Karoo Prinia, Jackal Buzzard and nest, Four-striped Grass Mouse, many communal burrows, and Silver-bottom Brown








## 7.2 SAMPLE POINT DESCRIPTIONS

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S1</b> 06-Sep-22 34°06'21.42"S 22°07'08.89"E	Track leading through secondary grassland with scattered shrubs	Low		
<b>S2</b> 06-Sep-22 34°06'17.87"S 22°07'12.51"E	Small mammal burrows in grassy area with scattered shrubs Open Space (OS) 3	Low		
<b>S3</b> 06-Sep-22 34°06'17.75"S 22°07'09.90"E	Secondary grassland with alien shrubs and <i>Eucalyptus</i> tree OS3	Low		





Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S4</b> 06-Sep-22 34°06'16.22"S 22°07'12.22"E	Disturbed secondary grassland OS3	Low		
<b>S5</b> 06-Sep-22 34°06'15.99"S 22°07'14.94"E	Secondary grassland with scattered shrubs OS3	Low		
<b>S6</b> 06-Sep-22 34°06'11.92"S 22°07'14.53"E	Disturbed secondary grassland with scattered shrubs OS3	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S7</b> 06-Sep-22 34°06'11.58"S 22°07'18.14"E	Natural dune thicket vegetation OS5	Low		
<b>S8</b> 06-Sep-22 34°06'06.56"S 22°07'03.69"E	Disturbed secondary grassland with patches of remnant indigenous shrubs Sportsfield	Low		
<b>S9</b> 06-Sep-22 34°06'12.87"S 22°07'07.88"E	Small mammal burrows in secondary grassland with calcrete substrate OS4	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S10</b> 06-Sep-22 34°06'14.25"S 22°07'06.39"E	Secondary grassland with scattered shrubs OS4	Low		
<b>S11</b> 06-Sep-22 34°06'14.66"S 22°07'08.30"E	Secondary grassland with scattered shrubs OS4	Low		
<b>S12</b> 06-Sep-22 34°06'19.11"S 22°07'11.85"E	Disturbed secondary grassland with scattered shrubs OS3	Low		










Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S13</b> 07-Sep-22 34°06'21.75"S 22°07'03.91"E	Disturbed secondary grassland; Many small mammal burrows OS1	Low		
<b>S14</b> 07-Sep-22 34°06'21.30"S 22°07'01.47"E	Disturbed secondary grassland with scattered shrubs; Many small mammal burrows OS1	Low		
<b>S15</b> 07-Sep-22 34°06'18.59"S 22°06'57.35"E	Track leading through disturbed secondary grassland OS1	Low		









Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S16</b> 07-Sep-22 34°06'24.32"S 22°07'04.65"E	Track leading through disturbed secondary grassland OS1	Low		
<b>S17</b> 07-Sep-22 34°06'26.68"S 22°07'06.44"E	Disturbed secondary grassland with scattered shrubs OS2	Low		
<b>S18</b> 07-Sep-22 34°06'25.44"S 22°07'13.29"E	Disturbed secondary grassland with scattered shrubs OS2	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S19</b> 07-Sep-22 34°06'24.89"S 22°07'08.49"E	Disturbed secondary grassland with scattered shrubs; Protected tree <i>Mimusops caffra</i> located at 34°06'25.13"S 22°07'07.25"E OS2 	Low		
<b>S20</b> 07-Sep-22 34°06'18.78"S 22°07'14.80"E	Disturbed secondary grassland with scattered shrubs OS2	Low		
<b>S21</b> 07-Sep-22 34°06'21.69"S 22°07'16.00"E	Disturbed secondary grassland with scattered shrubs OS2	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S22</b> 07-Sep-22 34°06'23.46"S 22°07'21.52"E	Dirt track (Photo 1) in the eastern portion of the assessment area adjacent to the natural dune vegetation (Photo 2) OS2	Low		
<b>S23</b> 07-Sep-22 34°06'20.33"S 22°07'26.87"E	<i>Eucalyptus</i> tree with Jackal Buzzard nest at 34°06'20.87"S 22°07'26.36"E in the eastern portion of the assessment area adjacent to the natural dune vegetation Recreational Area	Low		
<b>S24</b> 07-Sep-22 34°06'16.83"S 22°07'22.91"E	Construction camp / storage yard and Aloe nursery (Photo 1); Disturbed secondary grassland with scattered alien shrubs Recreational Area	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S25</b> 07-Sep-22 34°06'21.53"S 22°07'20.34"E	Dirt road and disturbed vegetation OS2	Low		
<b>S26</b> 07-Sep-22 34°06'08.67"S 22°07'18.48"E	Dirt road and edge of natural dune thicket vegetation OS5	Low		
<b>S27</b> 07-Sep-22 34°06'05.83"S 22°07'16.20"E	Planted grass and trees in completed section OS6	Low		



Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<b>S28</b> 07-Sep-22 34°06'06.76"S 22°07'14.39"E	Construction access road OS5	Low		
<b>S29</b> 07-Sep-22 34°06'05.94"S 22°07'09.72"E	Disturbed secondary grassland with scattered shrubs OS5	Low		
<b>S30</b> 07-Sep-22 34°06'05.23"S 22°07'06.47"E	Stockpiles of sand on disturbed secondary grassland with scattered shrubs and <i>Eucalyptus</i> tree Sportsfield	Low		

## 8. SUMMARY AND RECOMMENDATIONS

### 8.1 SUMMARY

Overall, the assessment area displays a low sensitivity from a terrestrial biodiversity and faunal perspective. The site is largely in a modified state due to previous land use practices (historical clearing for cultivation / pasture) and subsequent disturbances to the site. The habitat is comprised of secondary grassland with scattered indigenous and alien shrubs and the occasional alien tree (mostly *Eucalyptus* sp.). The habitat for fauna is generally of poor quality and likely only supports generalist species. The site has limited use by fauna and species diversity is low. No animal SCC were found during the field survey or are expected to occur on the site. A pair of Jackal Buzzard *Buteo rufofuscus*, which is endemic to southern Africa but a common species currently of Least Concern from a conservation perspective, was recorded on site with a nest in a *Eucalyptus* tree on the eastern boundary of the site.

In terms of regional biodiversity, it is evident both from the historical satellite imagery and the site visit that the site is in a modified state comprised of secondary vegetation. The site is therefore not considered a representative portion of the vegetation type or ecosystem and is not considered important for reaching biodiversity targets. The site is therefore considered to be of low importance from a terrestrial biodiversity perspective. One indigenous tree *Mimusops caffra*, which is Protected at a national level, was recorded in the southern portion of the assessment area.

### 8.2 IMPACT MANAGEMENT

The perceived impacts from the proposed changes to the layout from a terrestrial biodiversity and faunal perspective will be very low to negligible. The following recommendations are 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. The indigenous dune thicket vegetation on the east side of the site must be a no-go area for construction workers.
3. The site must be cleared of all alien plants and trees during the construction phase, except for the *Eucalyptus* tree at **34°06'20.87"S 22°07'26.36"E** in which the Jackal Buzzard pair has a nest, in the eastern portion of the assessment area adjacent to the natural dune vegetation. Jackal Buzzard use the same nest for up to five years or alternative between nest sites (Allan, 2005).
4. 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.
5. The indigenous and protected tree *Mimusops caffra* recorded at **34°06'25.13"S 22°07'07.25"E** in the southern portion of the assessment area must be retained if possible. If this is not possible then a permit for its removal must be obtained from the relevant authority, in this case the DFFE.

### 8.3 CONCLUSION

It is the opinion of the specialist that the impacts on terrestrial biodiversity and fauna will be very low to 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 **Figure 5**;
- Due to the disturbed habitat, the study area is of low sensitivity for terrestrial biodiversity and terrestrial animal species;
- 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

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## 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	:	<i>Pr.Sci.Nat.</i> 400401/12 (Zoological and Ecological Sciences)
Highest Qualification	:	MSc (Zoology) <i>cum laude</i>
Years of Experience	:	21
Contact Number	:	084 695 1648
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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 Biodiversity and Animal Species Compliance Statement for the Proposed Residential Development of ERF 19374 George, Western Cape (Sharples Environmental Services) – April 2022 to present.
- 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) – March 2022 to present.
- Terrestrial Biodiversity (including Fauna and Flora) Compliance Statement for the proposed Ganyesa Landfill Site, Ganyesa, North West Province (GIBB Environmental) – March 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 (City of Cape Town) – 2018 to 2022.
- Faunal Assessment for the Pelikan Park Phase 2 housing development, False Bay Nature Reserve, Cape Town, Western Cape (City of Cape Town) – 2018 to 2021.
- Terrestrial Biodiversity and Faunal Assessment for the Vanrhynsdorp Mining Right Application (MRA), Klawer, Western Cape (SA Lime and Gypsum) – 2020 to 2021.
- 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 Biodiversity Assessment for the Proposed Florida Heights Portion 10 Township Establishment Project, Uitenhage, Port Elizabeth, Eastern Cape (Sakhisizwe Developers) – 2018.
- Terrestrial Biodiversity Assessment (flora and fauna) for the Aquadene Residential Development Stormwater Infrastructure project, Richards Bay, (uMhlatuze Municipality) – 2017 to 2018.
- Terrestrial Biodiversity Assessment for the Proposed Vumani Rural Housing Project, Vryheid, KwaZulu-Natal (Abaqulusi Municipality) – 2014 to 2019.