

Plants, Animals & Terrestrial Biodiversity Assessment

prepared in accordance with the
*"Protocol for the Specialist Assessment and minimum report content
requirements for environmental impacts on Plant Species, Animal Species,
and Terrestrial Biodiversity"*

Encroachment on farm 219 Mossel Bay



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Plant Species, Animal Species
and Terrestrial Biodiversity
Encroachment on farm 219,
Hartenbos, Mossel Bay, Garden
Walk

10 November 2025

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SPECIALIST DETAILS & DECLARATION

This report has been prepared in accordance with the "Protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial biodiversity", as promulgated in terms of Section 24 (5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), published in GN. No. 320 dated 20 March 2020. It has been prepared independently of influence or prejudice by any parties.

The details of Specialist are as follows:

Specialist	Qualification and accreditation
Dr David Hoare (Pr.Sci.Nat.)	• PhD Botany • SACNASP Reg. no. 400221/05 (Ecology, Botany)

Declaration of independence:

David Hoare of BioCensus (Pty) Ltd is an independent consultant and hereby declares that he does not have any financial or other vested interest in the undertaking of the proposed activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by BioCensus (Pty) Ltd is not subject to or based on approval of the proposed project by the relevant authorities responsible for authorising the project.

Disclosure:

BioCensus (Pty) Ltd undertakes 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) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not.

Based on information provided to BioCensus (Pty) Ltd by the client and in addition to information obtained during the course of this study, BioCensus (Pty) Ltd presents the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practice.



Dr David Hoare

10 November 2025
Date

TERMS OF REFERENCE

This report is prepared in compliance with the PROTOCOL FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON TERRESTRIAL BIODIVERSITY, TERRESTRIAL PLANT SPECIES AND TERRESTRIAL ANIMAL SPECIES

This assessment follows the requirements of The Environmental Impact Assessment Regulations, as promulgated in terms of Section 24 (5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), published in GN. No. 320 dated 20 March 2020 for Terrestrial Biodiversity, and in GN. No. 1150 dated 30 October 2020 for Terrestrial Plant Species and Terrestrial Animal Species. As per these Regulations, the approach for assessing sensitivity with respect to Terrestrial Plant Species and Terrestrial Animal Species is in accordance with guidelines described in the latest version of the "*Species Environmental Assessment Guideline*", available at <https://bgis.sanbi.org/>.

The assessment and minimum reporting requirements of these protocols are associated with a level of environmental sensitivity identified by the national web based environmental screening tool (screening tool). The screening tool can be accessed at:

<https://screening.environment.gov.za/screeningtool>.

INTRODUCTION

Site location

The site is adjacent to the Garden Walk shopping centre which is under construction on Portion 58 of Farm 217, Hartenbos, Mossel Bay, Western Cape Province. Refer to Figure 1 below for the general location.

The shopping centre unknowingly encroached over the boundary of the property onto the adjacent farm and have cleared vegetation thought to be on portion 58 of 217. The vegetation of portion 58 or 217 was previously assessed and authorised for clearance in order to construct the shopping centre under construction.

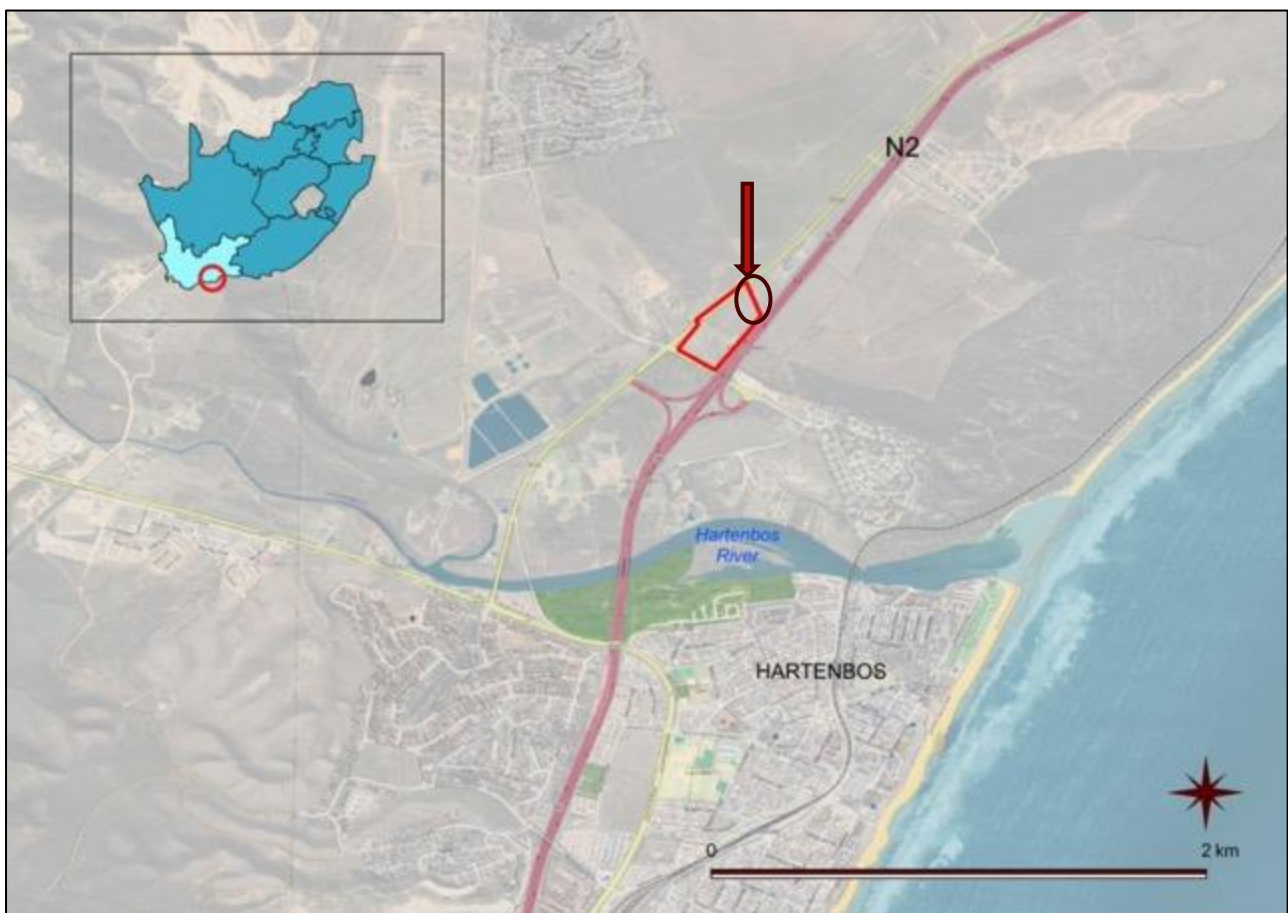


Figure 1 Locality map and area of clearing on adjacent property.

Identified Theme Sensitivities

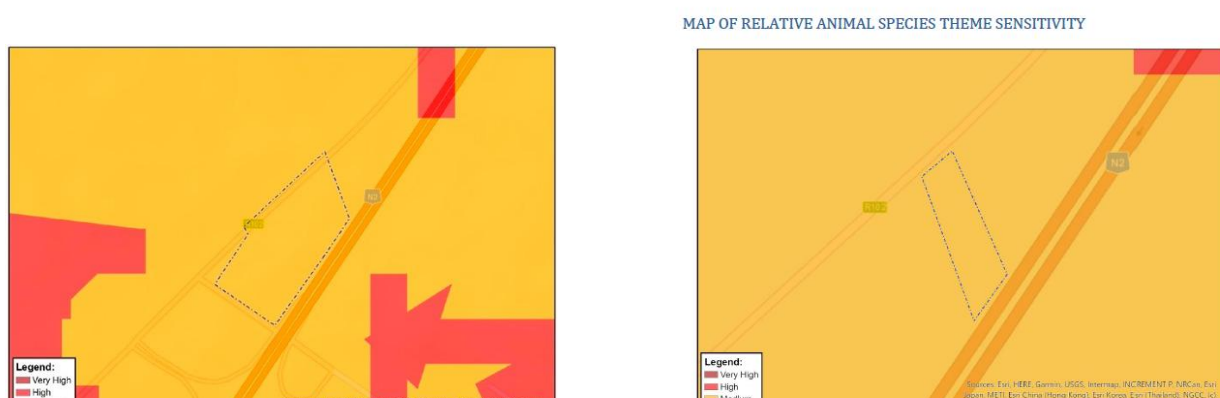
A sensitivity screening report from the DFFE Online Screening Tool was requested in the application category: Transformation of land | Indigenous vegetation. The DFFE Screening Tool report for the area, dated 17/04/2024, indicates the following ecological sensitivities. A follow-up screening tool report was generated on 30/09/2025 – findings remain unchanged.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Animal Species theme

Sensitivity features are indicated as follows:

Sensitivity	Feature(s)
Medium	Sensitive species 5
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

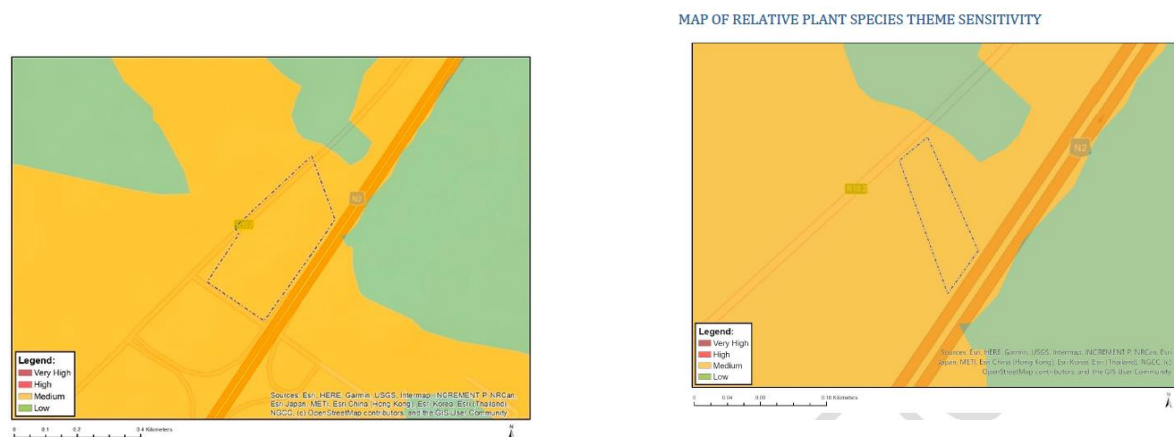


Plant Species theme

Sensitivity features are indicated as follows:

Sensitivity	Feature(s)
Medium	Lampranthus fergusoniae
Medium	Ruschia leptocalyx
Medium	Leucadendron galpinii
Medium	Leucospermum praecox
Medium	Selago ramosissima
Medium	Selago villicaulis
Medium	Hermannia lavandulifolia
Medium	Sensitive species 633
Medium	Sensitive species 268
Medium	Thamnochortus muirii
Medium	Marsilea schelpeana
Medium	Sensitive species 1024
Medium	Relhania garnotii
Medium	Agathosma eriantha
Medium	Agathosma muirii
Medium	Agathosma microcarpa
Medium	Euchaetis albertiniana
Medium	Polygala pubiflora

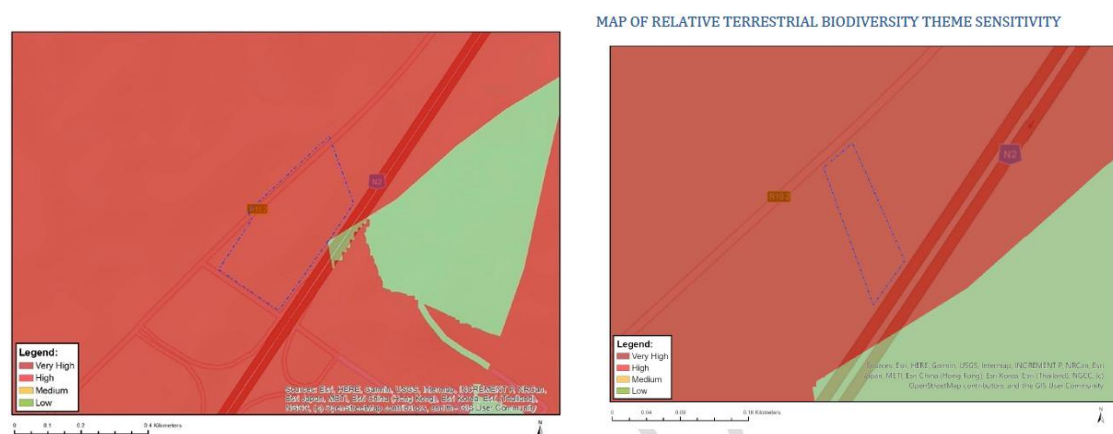
Medium	Sensitive species 980
Medium	Sensitive species 516
Medium	Drosanthemum lavisii
Medium	Sensitive species 800
Medium	Sensitive species 763
Medium	Diosma passerinoides



Terrestrial Biodiversity theme

Sensitivity features are indicated as follows:

Sensitivity	Feature(s)
Very High	CBA: Terrestrial
Very High	CBA 2: Terrestrial
Very High	CR_Mossel Bay Shale Renosterveld



ACTIVITY UNDERTAKEN

The Garden Walk shopping centre, set out the shade cloth boundary fencing and rescued all the Aloe and topsoil in accordance with their approved EMP, however the survey pegs were placed in the incorrect place, resulting in clearing about 2833m² extra vegetation on the adjacent property.

This area was assessed as part of the amendment application in terms of NEMA and the works took place in accordance with with EA issued, however, as the boundary was set out in the incorrect area, clearing was inadvertently unlawful.

A rehabilitation plan has been approved for the area above the retaining wall which is in process, the area below the retaining wall will remain transformed and a S24G application is being made to rectify the unlawful clearance of vegetation.

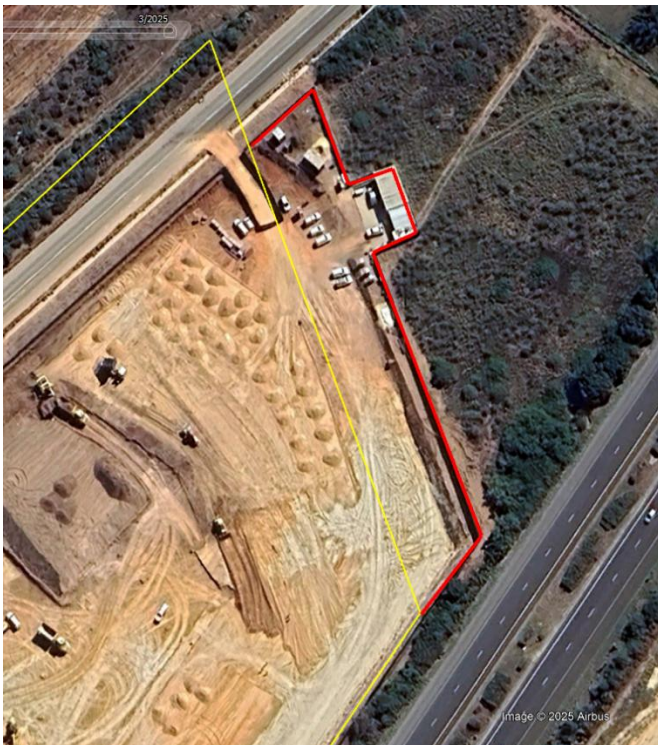


Figure 5 Area between the yellow boundary line and the retaining wall will be subject to the s24G application. The remainder of the area above the retaining wall is being rehabilitated according to an approved rehabilitation plan.



Figure 6 Transformed status of the area as assessed prior to the clearing. This confirms that the area did not support the Endangered Ecosystem as mapped.

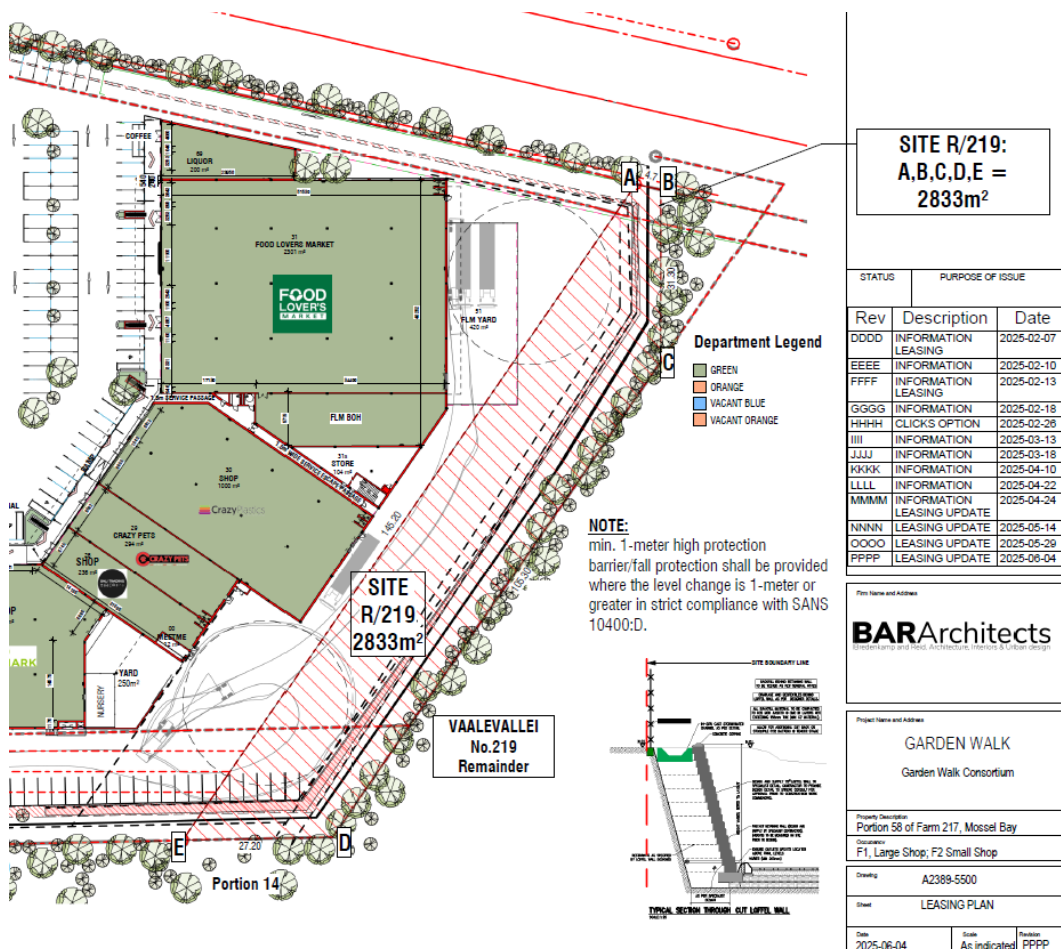


Figure 7 Approved SDP showing the area of encroachment.



Figure 8 Area above the retaining wall demarcated after discovering that it was outside the property boundary (photo HillLand Environmental).



Figure 9 Area above the retaining wall to be rehabilitated with indigenous planting of rescue plants from the site. Area below the retaining wall, completely transformed and will remain transformed (photo HillLand Environmental)

The area above the retaining wall has been cordoned off to prevent access and is now in the process of being rehabilitated according to the approved rehabilitation plan.



Figure 10 Remnant mapping from SANBI confirming the specialist findings that the area was previously transformed and that no Endangered Mossel Bay Shale Renosterveld persisted on site.

This report confirms the findings of the original assessment – namely:

OF NOT,

The on-site assessment confirms that natural vegetation (based on the legal, not ecological, definition) is present. This 'natural' vegetation is secondary as the entire area was previously cultivated (see the following section explaining the historical disturbance on site). It is hereby confirmed that within this 'natural' vegetation, no Mossel Bay Shale Renosterveld or estuarine habitat exists. Although the desktop assessment implies the possibility of sensitivity of the 'natural' vegetation, the existing remaining vegetation is secondary and disturbed, and does not meet the standards for inclusion in the CBA. Although the site has VERY HIGH sensitivity with respect to the Terrestrial Biodiversity Theme, this cannot be justified based on the existing status.

Findings of the original assessment were as follows:

Historical disturbance on site

Historical aerial photography from 1939, 1957 (Figure 9) and 1964 shows that the entire site (and surrounding areas) was ploughed, with a homestead shown within the cultivated lands. The 1974 and 1989 aerial photographs show the highway, which did not exist prior to then. Once the highway was built, the site was no longer cultivated, so it is assumed that any secondary vegetation on site developed since 1974 and is therefore approximately 50 years old. The homestead on the site also seems to have stopped being used at around that time. The construction of the highway and the subsequent operation thereof has caused continuous disturbance on site, especially along the edges.

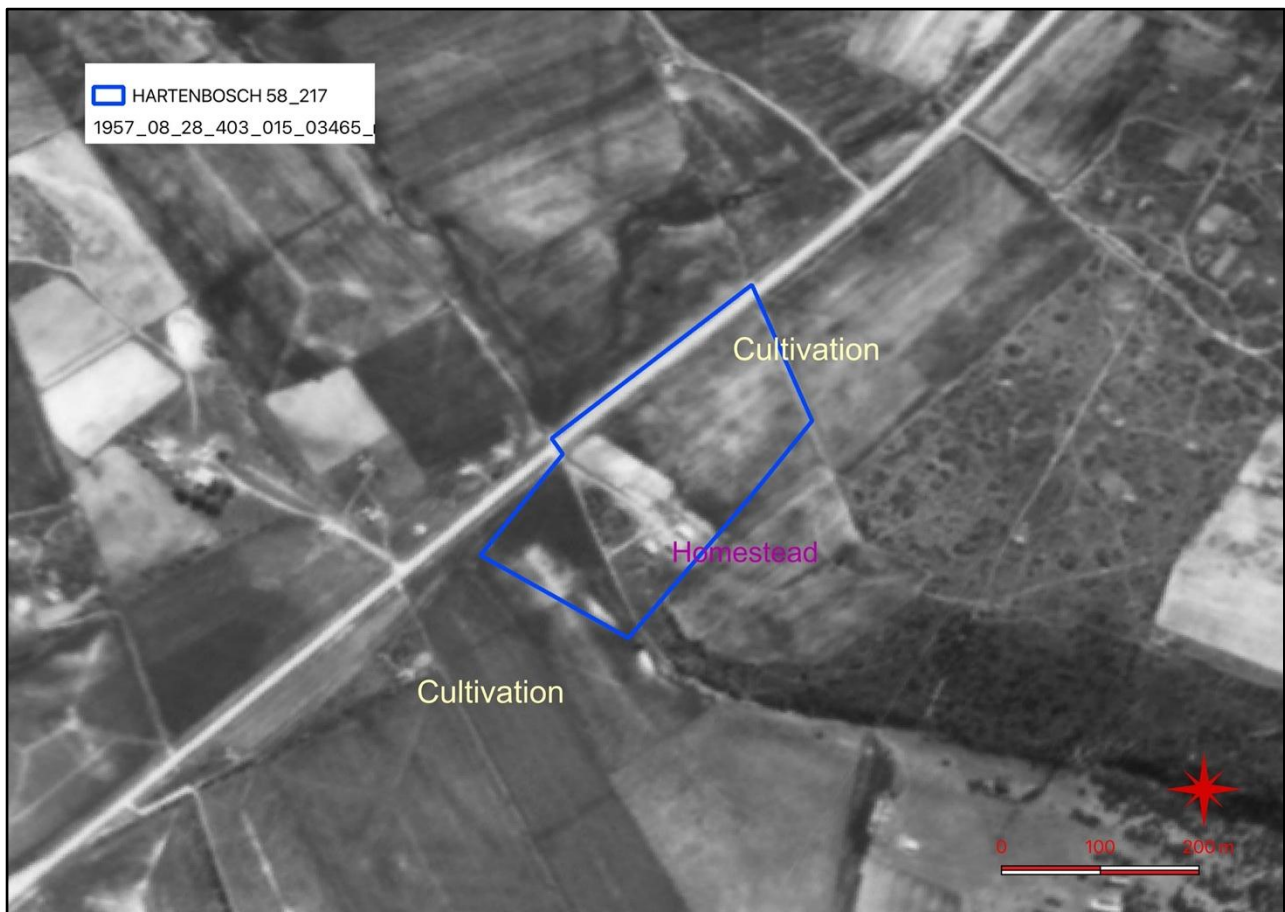


Figure 11 Aerial photograph dated 28/08/1957

Verification of observations on site

According to the "AMENDMENT TO THE PROTOCOLS FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON TERRESTRIAL ANIMAL AND PLANT SPECIES IN TERMS OF SECTIONS 24(5)(a) AND (h) AND 44 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998", a specialist report must include the following:

- 5.3.4 A verifiable evidence from the specialist's site inspection, including as a minimum:
- 5.3.4A.1 a map showing the specialist's GPS track in relation to the study area; and
 - 5.3.4A.2 at least 4 spatially representative sample site descriptions from across the study area that include as a minimum:
 - (a) precise geographical coordinates of the sample site;
 - (b) at least one in situ photograph (taken on site by the specialist during the site inspection) of the sample site; and
 - (c) a habitat description of the sample site.

Based on a detailed field survey to verify conditions on site, a landcover and habitat mapping exercise was undertaken for the site. This identified the main habitat occurring on site as **Secondary vegetation on old lands** (entire site). This included the area immediately adjacent to the site which is now in question.

The habitat assessment was important for understanding the suitability of habitat on site for various plant and animal species of concern, which usually have very specific habitat requirements.

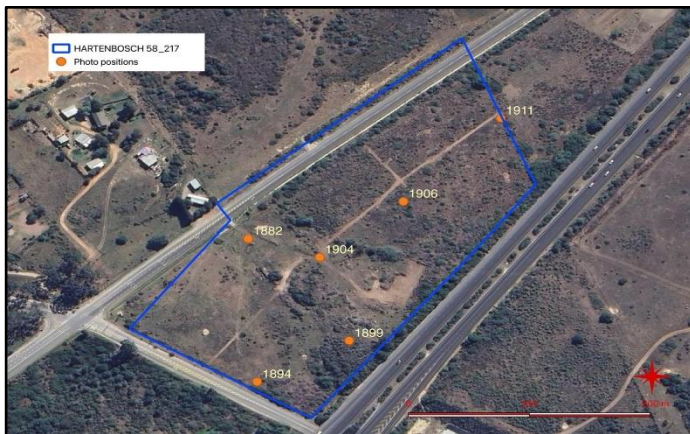


Figure 12 Location of the photographs taken on site during the site inspection for the original study. Photo 1911 (right) taken on the boundary of the affected area.

Secondary vegetation on old lands

The vegetation on site consisted of a small number of species that had colonised the site after cultivation was discontinued. This means that the original vegetation that occurred there was completely removed.

The ground cover was dominated by the grasses, *Cenchrus clandestinus* (kikuya), *Eragrostis curvula*, *Megathyrsus maximus*, *Hyparrhenia hirta*, *Melinis repens* and *Digitaria sanguinalis*, along with the weedy dwarf shrubs, *Atriplex semibaccata*, *Solanum tomentosum* and *Nidorella ivifolia*. Woody shrubs occurring on site are *Osteospermum moniliferum*, *Lycium ferocissimum*, *Aloe ferox*, *Searsia pallens*, *Searsia crenata*, *Gymnosporia buxifolia*, *Vachellia karroo*, *Azima tetracantha*, *Asparagus africanus*, *Carissa bispinosa*, *Solanum linnaeanum* and *Buddleja saligna*.

There were several weeds that occurred on site, including *Lantana camara* and *Acacia cyclops*, which are dominant in places, *Datura stramonium*, *Datura ferox*, *Opuntia stricta*, *Cirsium vulgare*, *Myoporum insulare*, *Gomphocarpus physocarpus* and *Solanum linnaeanum*. Most of these are declared alien invasive species.

One listed plant species was possible to be found on site, namely *Hermannia lavandulifolia* (Vulnerable A2c). This species is widespread and common. Targeted field surveys indicate that it readily colonises disturbed sites, often forming dense stands in previously disturbed areas. There is a *Hermannia* occurring on site that is morphologically similar to this species, but it is *Hermannia holosericea*. No plants of *H. lavandulifolia* were found during searches on site prior to any vegetation clearing taking place.

No other flagged plant species were found on the property and no potentially suitable habitat was present for any other species flagged as potentially occurring there. The highly transformed state of the site explained the absence of these species.

There were therefore no threatened, near threatened or rare plant species that occurred in or close to the cleared area. It is therefore verified that the Plant Species Theme had a LOW sensitivity prior to clearing.

Animal species

No animal species of conservation concern were found on the site, and no suitable habitat conditions were present to support the flagged animal species. **It was therefore verified that the Animal Species Theme had LOW sensitivity for the site (**

Habitat sensitivity

According to the "PROTOCOL FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON TERRESTRIAL BIODIVERSITY", there are only two sensitivity classes for the Terrestrial Biodiversity Theme, namely VERY HIGH or LOW. The VERY HIGH category includes any area of natural vegetation that falls within one of the following categories:

1. terrestrial critical biodiversity areas (CBAs).
2. terrestrial ecological support areas (ESAs).
3. protected areas as defined by the National Environmental Management: Protected Areas Act, 2004.
4. priority areas for protected area expansion.
5. strategic water source areas (SWSAs).
6. freshwater ecosystem priority areas (FEPA) subcatchments.
7. indigenous forests.

The site contained only secondary vegetation. It was confirmed from the site visit that the area was in a secondary state prior to clearing and therefore had LOW sensitivity according to the Terrestrial Biodiversity Theme.

A map of habitat sensitivity on site for the Terrestrial Biodiversity Theme is provided in the figure below.



Figure 13 Site Ecological Importance of habitats on site – from the original assessment, which would extend onto the adjacent property

CONCLUSION

Desktop information, field data collection and mapping from aerial imagery undertaken prior to any clearing on site provided the following verifications of patterns for the plant species theme:

1. No plant or animal species of concern / flagged plant species were likely to occur in the area cleared.
2. The site was confirmed to have LOW sensitivity with respect to the Terrestrial Plant and Animal Species Themes.
3. The Terrestrial Biodiversity Theme was reasoned to be VERY LOW sensitivity.
4. There was no remaining Mossel Bay Shale Renoserveld on site and **there has been no unlawful clearing of Mossel Bay Shale Renoserveld**. The vegetation that was cleared, was not Mossel Bay Shale Renoserveld, but consisted of secondary vegetation on transformed land, it supported indigenous species, but not endangered ecosystem.

RECOMMENDATIONS

- Recommendations in the EA and EMPr for the development, namely demarcation of the work area with shade netting, plant rescue and topsoil rescue, took place prior to clearing any vegetation. The only inconsistency was that the incorrect survey points were used which resulted in clearance of transformed vegetation outside of the approved EA area and property boundary.
- The conditions of the EA and EMPr would have been the same conditions imposed had the area been included.
- Continue with the rehabilitation of the area above the retaining wall as per the approved rehabilitation plan and authorise the clearance of vegetation in the area cleared below the retaining wall.

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