

## SITE SENSITIVITY VERIFICATION REPORT (SSVR)

For

**THE PROPOSED THE CLEARANCE OF INDIGENOUS VEGETATION TO  
EXPAND EXISTING CULTIVATION AREAS ON PORTION 21 AND 22 OF  
FARM 232, REDFORD FARM, LODESTONE WINE AND OLIVE ESTATE, THE  
CRAGS, PLETTENBERG BAY**



(Hoare, 2020)

<b>Submitted by</b>	HilLand Environmental
<b>HilLand reference</b>	PLE22/056/17
<b>Date</b>	28 March 2022
<b>DEADP Case Number</b>	16/3/3/1/D1/15/0009/22
<b>DEADP Case Officer</b>	Dorien Werth
<b>Client</b>	Alguada Farming Ventures CC

**ISSUED BY:**

HillLand Environmental  
Environmental Management Consultants  
Victoria Heights  
P.O. Box 590  
George, 6530

Tel: 044 889 0229  
Fax: 086 542 5248  
E-mail: [cathy@hilland.co.za](mailto:cathy@hilland.co.za) / [environmental2@hilland.co.za](mailto:environmental2@hilland.co.za)  
Website: [www.hilland.co.za](http://www.hilland.co.za)

**Site Sensitivity Verification Report (SSVR) for the proposed clearance of indigenous vegetation to expand existing agricultural fields on Portion 21 and 22 of Farm 232, Lodestone Winery, Redford Farm, The Craggs, Plettenberg Bay**

**Submitted to:**

**Review and comment – submission with Draft BAR**

**Conditions of report use:**

The report is the property of the sponsor and the author, who may publish it, in whole, provided:

1. That written approval is obtained from the author and that **HillLand Environmental** is acknowledged in the publication;
2. That **HillLand Environmental** is indemnified against any claim for damages that may result from publication;
3. The contents of this report may not be used for purposes of sale or publicity or advertisement without the prior written approval of **HillLand Environmental**.
4. That it is understood that **HillLand Environmental** accepts no responsibility for the contractor's failure to follow the recommended programme.
5. That it is understood that **HillLand Environmental** accepts no responsibility for the contractor's deviation or non-compliance to any specifications or guidelines provided in the report.
6. That it is understood that all figures, plates and diagrams are copyrighted and may not be reproduced by any means, in any form, in part or whole.

**Table of Contents**

**1 INTRODUCTION ..... 4**

**2 PURPOSE OF THIS REPORT ..... 4**

**3 SENSITIVITY VERIFICATION AND METHODOLOGY ..... 4**

**4 RESULTS OF SITE VERIFICATION..... 5**

**4.1 DESKTOP ASSESSMENT..... 5**

**4.1.1 AERIAL PHOTOGRAPHIC ANALYSIS ..... 5**

**4.1.2 BIODIVERSITY MAPPING ..... 7**

**4.2 SITE ASSESSMENT ..... 10**

**5 SITE SENSITIVITY VERIFICATION ..... 10**

**5.1 THEMES..... 11**

**6 CONFIRMATION OF SENSITIVITY ..... 15**

**7 CONCLUSION OF SITE SENIVITY VERIFICATION ..... 16**

## 1 INTRODUCTION

**HillLand Environmental** have been appointed as the Environmental Assessment Practitioners (EAP) by the applicant, **Alguada Farming Ventures cc**, represent by **Mr B. Archibald**, to ensure compliance with regulations contained in the National Environmental Management Act (NEMA Act No. 107 of 1998) and the Environmental Impact Assessment Regulations (2014), as amended, the proposed clearance of indigenous vegetation for the expansion of the existing cultivation areas on Portion 21 and 22 of Farm 232, Redford Farm, The Craggs, Plettenberg Bay (Lodestone Wine and Olive Estate).

## 2 PURPOSE OF THIS REPORT

This site sensitivity verification report forms part of the Basic Assessment Process for the proposed expansion of Portion 21 and 22 of Farm 232. This report addresses the findings of the Screening Tool Report, generated from the National Web Based Environmental Screening Tool (as generated August 2021).

The "Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes ("the protocols") were promulgated in Government Notice No. 320, published in Government Gazette No. 43110 on the 20th of March 2020 and which came into effect on the 9th of May 2020. The Protocols are allowed for in terms of Sections 25(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (as amended) (Act No. 107 of 1998) ("NEMA").

The Protocols must be complied with for every new application for Environmental Authorisation (EA) that is submitted after 9 May 2020. According to the Protocols, the EAP must verify the current use of the site in question and its environmental sensitivity as identified in the screening tool to determine the need for specific specialist inputs.

## 3 SENSITIVITY VERIFICATION AND METHODOLOGY

According to the protocols Site Sensitivity Verification must be undertaken by the EAP or in some circumstances by a specialist and must include the following:

- Desktop analysis
- Site inspection
- Other relevant information which can inform the sensitivity rating assigned by the screening tool.

This site sensitivity verification statement was compiled by the EAP, HillLand Environmental, based on the following:

- Site visits (March 2020 – to date);
- A desktop investigation aerial photography and the various mapping tools (biodiversity and land use mapping, Western Cape Biodiversity Spatial Biodiversity, CBA & ESA mapping, NBA mapping and Cape Farm Mapper);
- Input from the appointed terrestrial biodiversity specialist (Dr D Hoare);
- Input from Agricultural specialist (J. Putter);
- Input from Department of Agriculture;
- Input from Heritage Western Cape.

## 4 RESULTS OF SITE VERIFICATION

### 4.1 DESKTOP ASSESSMENT

#### 4.1.1 AERIAL PHOTOGRAPHIC ANALYSIS

The earliest historic imagery available is from 1936 and the approximate position of the properties are highlighted below.



**Historic aerial imagery from 12.31.1936**

Although not clear, it appears that the entire site was in an intact natural state. A vehicle track meanders across the northern part of the property, leaving it in the south-eastern corner. The only transformation in the area was the cultivated land northeast of the property and various vehicle track cross the area. "Some lighter coloured areas are irregular in shape and suggest localized fire patches. Most other variation in the aerial photograph seems to be natural variation in natural habitats that shows differences in biomass in different parts of the landscape" (Hoare, 2020, updated 2022).



**Historic imagery from 1.21.1961 (NGI, 2021)**



Although the image is not very clear, the image shows widespread clearing across the site. "This is much more obvious in an aerial photograph from 1962 (a year later), in which it is clear that most of the vegetation outside of the drainage valleys was removed. In comparison to other areas outside of the site that look to be in a natural state, there does not appear to be any upland vegetation remaining on site on this date (see white areas in 1962 image). The nature of this removal is not known – it could be ploughing, but could also have been clear-cutting without soil disturbance, or burning. Of interest is that the disturbance persisted for at least a year (from 1961 to 1962), which would suggest that it was not burning, but complete vegetation removal" (Hoare, 2020, updated 2022).

Historic imagery from 1980 shows a complete vegetation recovery with scattered small trees across the properties. Based on the patterns on patterns in the areas in a natural state, it is most likely non-indigenous trees (as confirmed by the specialist). "The first is that the site was not cleared for an extended period of time, whether it was cultivated or whether temporarily cleared. The second is that there was not initially dominant alien invasion on site at this point in time. It is also clear from this date of aerial photograph that there were still strong landscape level ecological linkages between the site and surrounding natural areas towards both the west and the south. The complete aerial photograph (not shown here) also shows that there were many more distant natural areas" (Hoare, 2020, updated 2022).



**Historic imagery from 4.7.1980 (NGI, 2021)**

Imagery from 19980 shows a strip of cultivation across the western side of the property, otherwise the remaining areas on site have not been further disturbed. "There is, however, clear densification of alien trees along the areas close to the eastern boundary, stretching up to the north-eastern corner, on the northern end of the main drainage line, and in a small node on the south-central part of the site, where it can also be seen that a small farm dam has been established" (Hoare, 2020, updated 2022).

The earliest imagery from Google Earth – 2004, clearly shows a plough-line patterns in the areas of the property that has been cultivated previously. "It can be seen the western side of the side was invaded by alien trees, but these follow parallel rows that follow plough lines. It also shows areas that were heavily invaded by alien trees at the time (Google earth Image dated 27 October 2009), which shows the areas along the northern boundary previously invaded by alien trees, as well as a line in the central part of the site".

The 2009 Google Earth Aerial also shows that the entire eastern side of the site was under cultivation in some way. Evidence from old aerial photographs (as provided above) indicates that this was a combination of clearing in 1962, followed by some level of alien invasion.



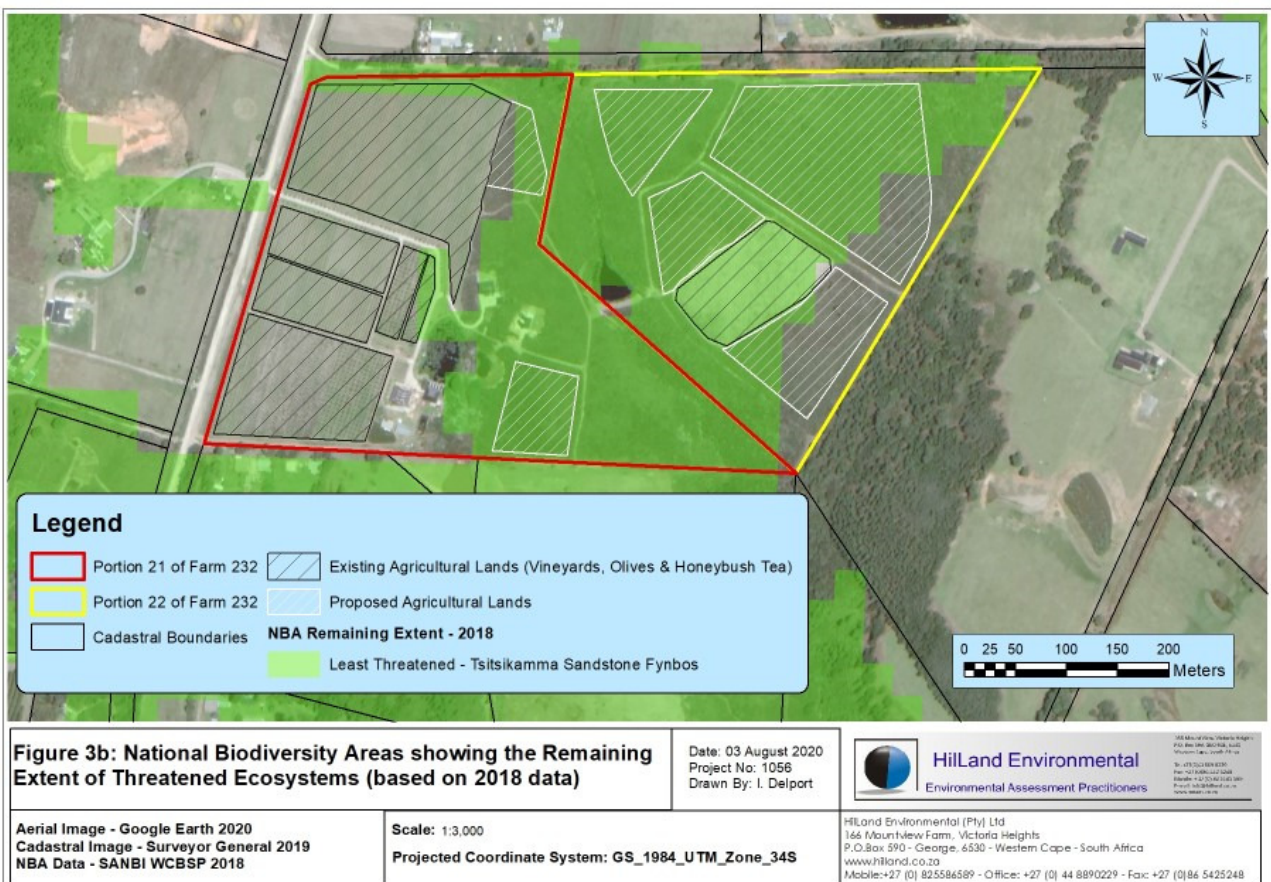
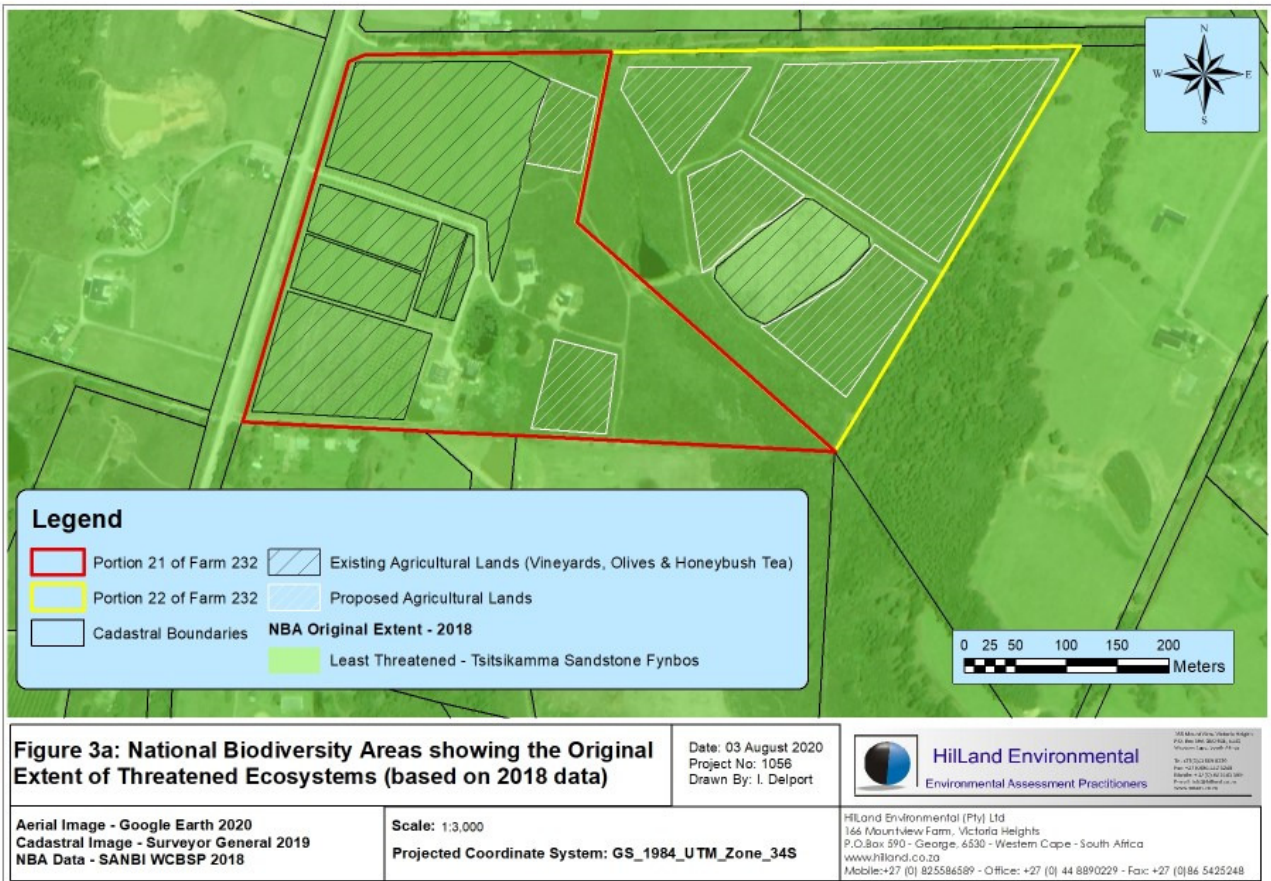
Imagery from 2009



**4.1.2 BIODIVERSITY MAPPING**

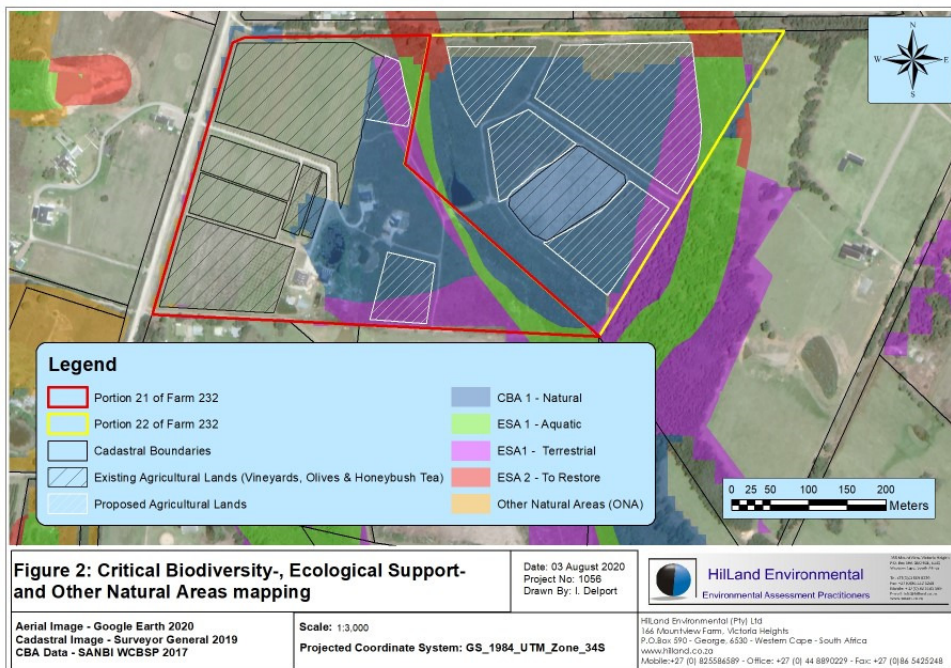
The National Biodiversity Areas showing the original extent of threatened ecosystems (based on 2018 data), both of the properties have been mapped as forming part of least threatened Tsitsikamma Sandstone Fynbos. The remaining extent shows some level of transformation which corresponds with the historic cultivation areas.



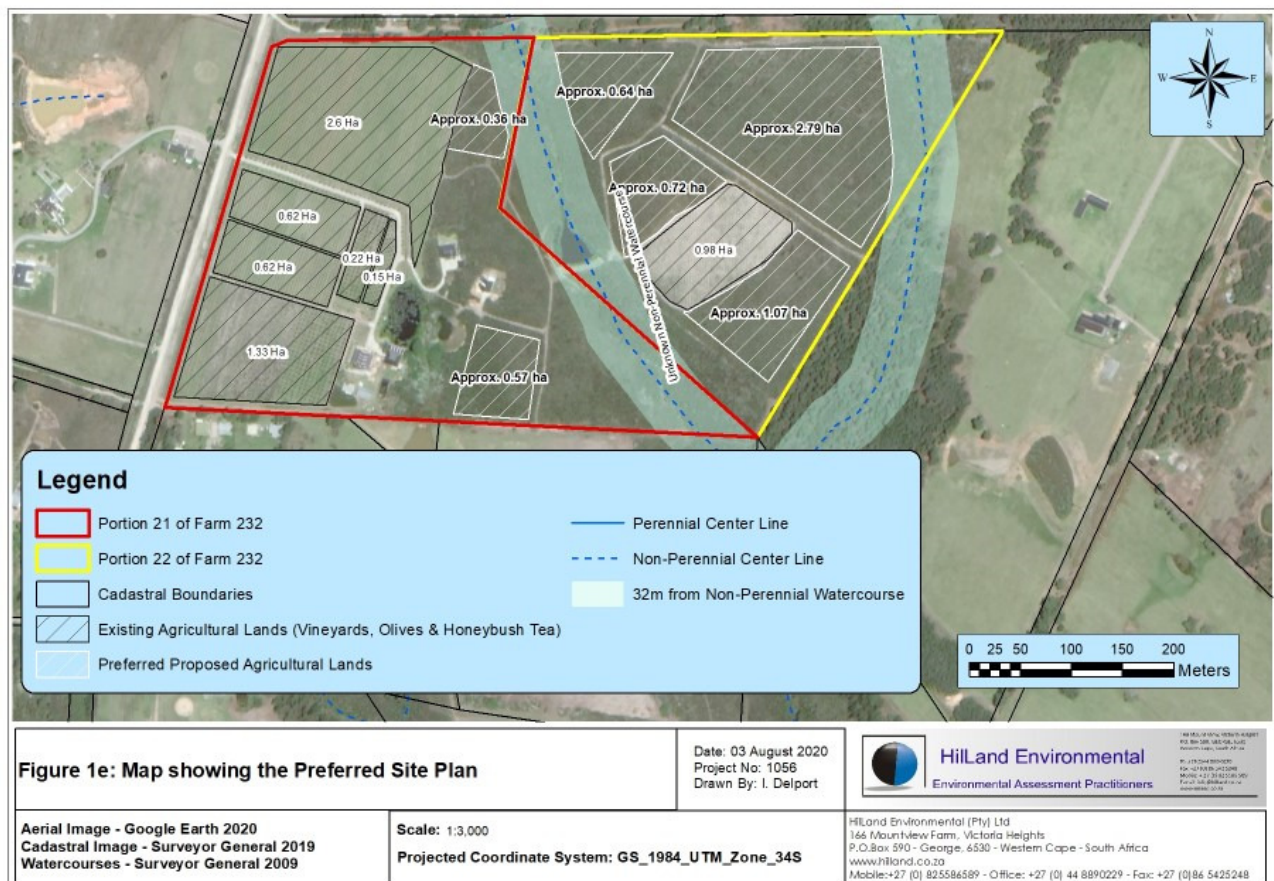




The Western Cape Biodiversity Spatial Plan (WC BSP, 2017) maps the property as forming part of natural Critical Biodiversity Areas (CBA 1), aquatic and terrestrial Ecological Support Area (ESA 1 & 2) and ESA to restore.



The National Freshwater Ecosystem Priority Areas (NFEPA, 2010) shows the two (2) non-perennial drainage lines on the properties. All proposed cultivation fields are located outside of the buffer areas of these drainage lines.



## 4.2 SITE ASSESSMENT

In accordance with the specialist, "The vegetation on site consists of a mix of fynbos and thicket species. It is located in blocks separated by pathways, approximately 2 m wide, that have been cut through the fynbos. The pathways consist of grasses and other weedy species, such as *Arctotheca prostrata*. The margins of the pathways contain a diversity of fynbos species, but deeper in the fynbos is moribund and has lower species richness and limited species composition. The valley through the site has a taller vegetation with more thicket species.

There were a small number of declared alien invasive species found on site, including *Acacia mearnsii*, *Hakea sericea*, and some dead pine trees. The pines and wattles were much more dominant on the adjacent property to the south-east.

No rare or threatened plant species were seen on site, despite a careful search for any such species that was assessed as having a possibility of occurring on site. A photograph originally interpreted as being *Erica sparsa* was identified preliminarily as *Erica onusta*, but this was found to be an incorrect identification after viewing the physical specimen.

## 5 SITE SENSITIVITY VERIFICATION

The table below serves to:

- Indicate the theme sensitivities identified in the screening tool report (August & November 2021). The screening tool was produced again March 2022 to assess whether any sensitivities changed from the previous screening tool reports.

It is necessary to confirm / dispute the sensitivity rating and need for the various specialist inputs called for in terms of the screening tool report (August & November 2021 as well as March 2022).

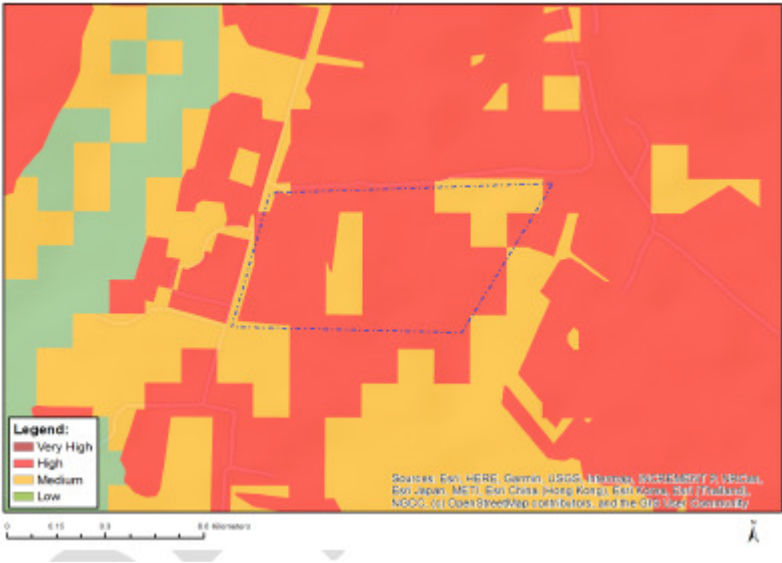
The screening tool generated is attached to this report.

Based on the screening tool reports and the environmental sensitivity of the site, the following themes are identified (March 2022 showed the same sensitivities):

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture theme		X		
Animal species theme		X		
Aquatic biodiversity theme	X			
Archaeological and cultural heritage theme				X
Civil aviation theme			X	
Defence theme				X
Palaeontology theme				X
Plant species theme			X	
Terrestrial biodiversity theme	X			

**5.1 THEMES**

The table below verifies the actual sensitivity of the aspects highlighted as needing potential specialist assessment / verification.

Recommended impact assessment	Motivation for including and not including the impact assessment										
<p><b>Agricultural Impact Assessment</b></p>	<p>The screening tool report showed a high and medium sensitivity for the following reasons:</p> <table border="1" data-bbox="400 427 1485 613"> <thead> <tr> <th>Sensitivity</th> <th>Feature(s)</th> </tr> </thead> <tbody> <tr> <td>High</td> <td>Land capability;09. Moderate-High/10. Moderate-High</td> </tr> <tr> <td>High</td> <td>Small Holdings;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate</td> </tr> <tr> <td>High</td> <td>Small Holdings;Land capability;09. Moderate-High/10. Moderate-High</td> </tr> <tr> <td>Medium</td> <td>Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate</td> </tr> </tbody> </table>  <p>The intended use of the land is for agriculture which is in line with the agricultural sensitivities highlighted.</p> <p>The sensitivity rating of high and medium is <b>confirmed</b>.</p> <ul style="list-style-type: none"> <li>• Assessment done by an agricultural specialist; &amp;</li> <li>• CARA application submitted to Department of Agriculture.</li> </ul> <p>As the proposal entails the cultivation of virgin land (agriculture), an agricultural specialist was appointed to conduct an agricultural agro – ecosystem specialist assessment (dated: 8 March 2021). The report has been compiled in accordance with the protocol.</p> <p>The specialist input together with a CARA application has been submitted to the Department of Agriculture (26<sup>th</sup> of March 2021). The Provincial Agricultural Department's supporting comments and report has been sent to the National Department on the 13<sup>th</sup> of July 2021 to issue the CARA permit.</p> <p>A CARA permit was issued on 04/03/2022, ref: 19/7/3/R333.</p>	Sensitivity	Feature(s)	High	Land capability;09. Moderate-High/10. Moderate-High	High	Small Holdings;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate	High	Small Holdings;Land capability;09. Moderate-High/10. Moderate-High	Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Sensitivity	Feature(s)										
High	Land capability;09. Moderate-High/10. Moderate-High										
High	Small Holdings;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate										
High	Small Holdings;Land capability;09. Moderate-High/10. Moderate-High										
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate										
<p><b>Landscape / visual impact assessment</b></p>	<p>The need for this assessment is <b>refuted</b>.</p> <p>The proposal will form part of the existing and surrounding land uses. The farm has existing agricultural lands and surrounding land uses are agriculture – as such, the proposal will form part of these land uses.</p> <p>No change to the visual character of the area will occur. No change to the sense of place.</p>										



**Archaeological and cultural heritage impact assessment and Palaeontology impact assessment**

The general protocol was used to verify the site.

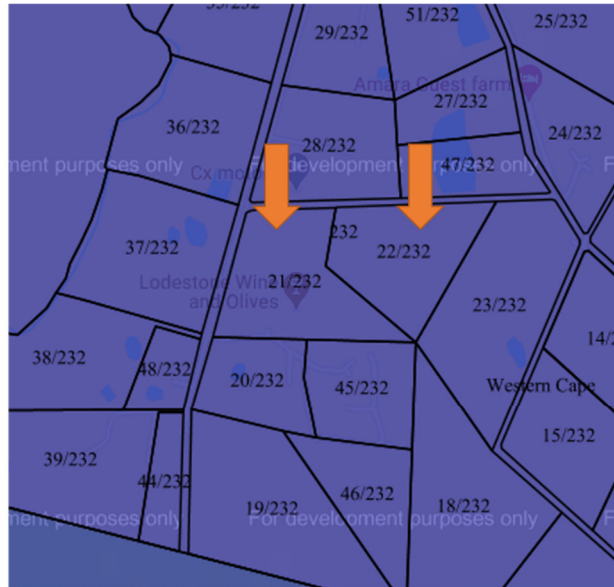
The screening tool showed a low sensitivity for these themes which is **confirmed**.

A NID has been submitted to HWC to confirm if any additional investigations are required.

SAHRIS, PalaeoSensitivity (2021) indicates the area as low sensitivity with the following required action:

“no palaeontology studies are required however a protocol for finds is required”

A protocol will be included in the EMP.



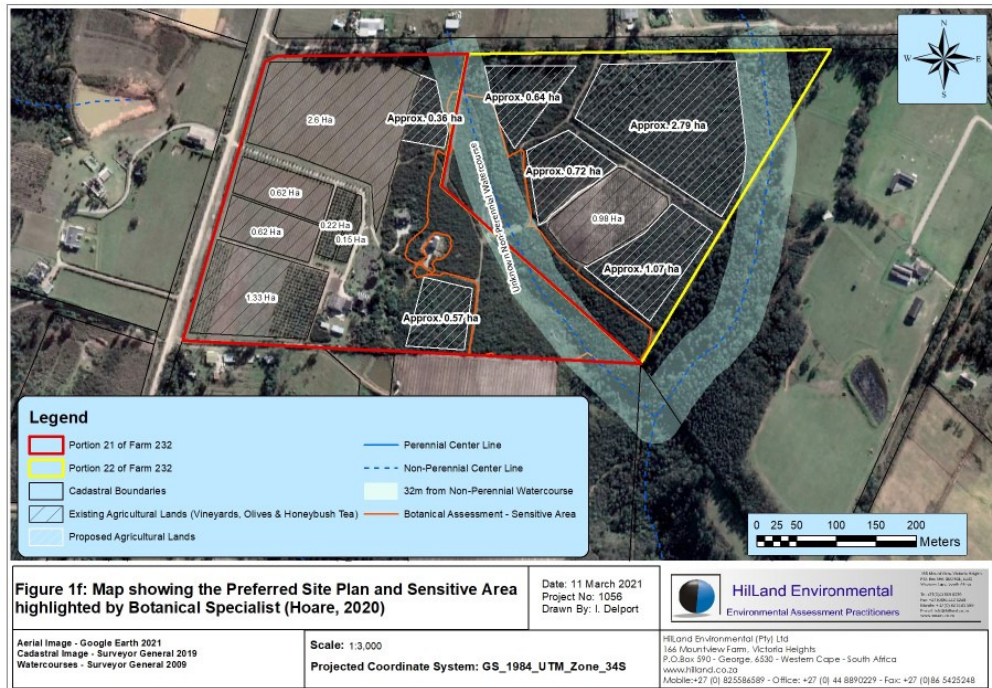
Colour	Sensitivity	Required Action
RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	desktop study is required
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

**HWC comments on the NID (17 December 2021) confirmed** “you are hereby notified that, since there is no reason to believe that the proposed expansion of existing vineyard on Ptn 21 and 22 of Farm 232, Lodestone, Plettenberg Bay, will impact on heritage resource, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.”

**Terrestrial biodiversity impact assessment**  
**And**  
**Plant Species Assessment**

As the listed activity is for the clearance of indigenous vegetation and the screening tool highlighted the terrestrial biodiversity as very high and plants as high, the protocol requires the specialist to verify the site.

- A desktop study and site assessment by the EAP to confirm the presence of indigenous vegetation to assess the need for a specialist input; Specialist appointed to undertake an assessment.
- A botanical and ecological impact assessment was done by Dr D. Hoare (SACNASP registered) (report dated August 2020, updated 2022).



The recommendations as provided by the specialist will be incorporated into the EMPr.

Specialist finding (Haore, 2022):

Sensitivity & Feature(s)	Presence / absence
Medium <i>Ruschia duthiae</i>	Absent
Medium <i>Indigofera hispida</i>	Absent
Medium <i>Aspalathus bowieana</i>	Absent
Medium <i>Leucospermum glabrum</i>	Absent
Medium <i>Mimetes pauciflorus</i>	Absent
Medium <i>Selago rotundifolia</i>	Absent
Medium Sensitive species 419	Absent
Medium <i>Erica stylaris</i>	Absent
Medium <i>Erica glandulosa</i> subsp. <i>fourcadei</i>	Absent
Medium <i>Centella longifolia</i>	Absent
Medium <i>Marsilea schelpeana</i>	Absent
Medium <i>Felicia westae</i>	Absent
Medium <i>Osteospermum pterigoideum</i>	Absent
Medium Sensitive species 53	Absent
Medium Sensitive species 654	Absent
Medium <i>Acrolophia lunata</i>	Absent
Medium <i>Pterygodium cleistogamum</i>	Absent

**Aquatic biodiversity impact assessment**

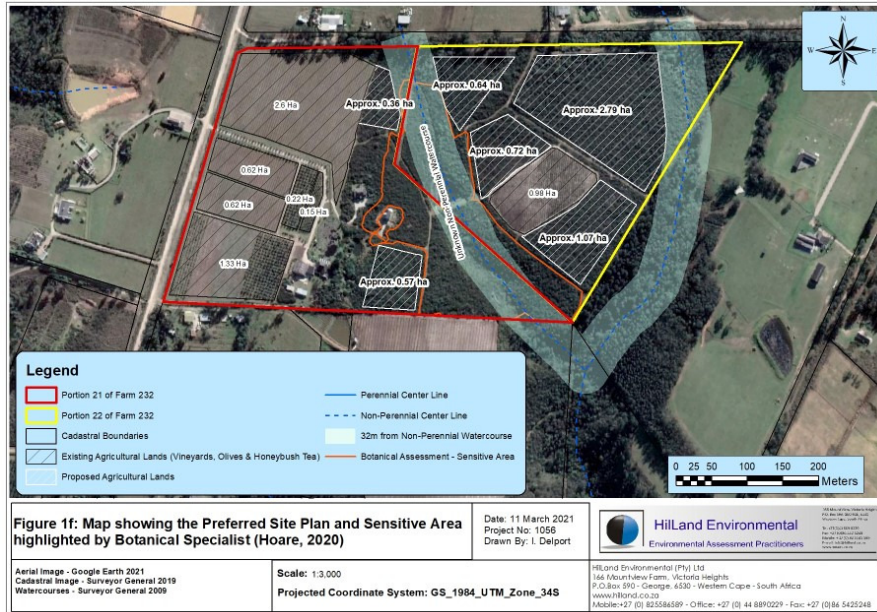
The protocol for the specialist assessment and minimum report content requirements for environmental impacts on aquatic biodiversity was used.

The site was identified as Very High sensitivity for the following reasons:

Sensitivity	Feature(s)
Very High	Strategic water source area
Very High	Freshwater ecosystem priority area quinary catchments

The proposal will however not impact on the water course or water resources as all and a buffer is included around the water courses.

The terrestrial biodiversity assessment covers the aquatic ecosystem.



**Hydrology Assessment**

The general protocol was used.

Existing water use rights will remain in place and the proposal will have no hydrological impact. No change to the current hydrological systems. As such no hydrological assessment is deemed necessary.

**Socio-economic impact assessment**

The general protocol was used.

The scope of the proposal, the BAR and the agricultural specialist report cover the socio-economic aspects of this proposal. No separate socio-economic impact assessment is deemed necessary.

**Animal species impact assessment**

The protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial animal species was used. The assessment is covered in the terrestrial biodiversity assessment (Hoare, 2020 updated 2022).

Specialist findings (Haore, 2022):

Sensitivity	Feature(s)	Common name	Presence or absence on site
High	Aves-Circus maurus	Black Harrier	Absent
High	Aves-Bradypterus sylvaticus	Knysna Warbler	Absent
Medium	Invertebrate-Sarophorus punctatus	Afrotropical dung beetle	Absent
Medium	Invertebrate-Aneuryphymus montanus	Yellow-winged agile grasshopper	Absent
Medium	Amphibia-Afixalus knysnae	Knysna Leaf-folding frog	Absent
Medium	Aves-Circus ranivorus	African marsh harrier	Absent
Medium	Aves-Neotis denhami	Denham's bustard	Absent
Medium	Insecta-Tsitana dicksoni	Dickson's sylph	Absent
Medium	Mammalia-Chlorotalpa duthieae	Duthie's golden mole	Absent
Medium	Sensitive species 7	Small antelope	Absent



Based on the above themes the summary is as follows:

- Agricultural impact assessment – **confirm the screening tool assessment of high sensitivity** – agricultural specialist has been appointed and CARA application is in process – the application is for use of the agricultural resource for which the sensitivity applies.
- Landscape/Visual Impact Assessment; - **disputed** – no change to the landscape character – continued agricultural use which is in line with the zoning, current use and sense of place of the area.
- Archaeological and Cultural Heritage Impact Assessment; - **Disputed** – the theme sensitivity is low and as such a Heritage impact assessment is highly unlikely to be required. A NID has been submitted to HWC in order to confirm whether any specialist assessments are necessary or not.
- Palaeontology Impact Assessment – **Disputed** – the theme sensitivity is low and as such a Heritage impact assessment is highly unlikely to be required. A NID has been submitted to HWC in order to confirm whether any specialist assessments are necessary or not.
- Terrestrial Biodiversity Impact Assessment – **Disputed** – a terrestrial biodiversity specialist has been appointed and the outcome of his assessment is that the sensitivity of the theme is not Very High, but moderate at best.
- Aquatic Biodiversity Impact Assessment – **Disputed** – the aquatic biodiversity theme is rated as very high, however the proposed agricultural activity does not impact on the water resource at all, the aquatic biodiversity rating for the areas in question should be **low**.
- Hydrology Assessment – **Disputed** - no impact on the hydrology associated with the proposed activity.
- Socio-Economic Assessment – **Refuted** – there are no changes to the current socio-economic setting. The proposal is on an existing farm that is surrounded by agricultural use lands and the socio-economic aspects are addressed in the agricultural specialist report and in the BAR.
- Plant Species Assessment - **confirm the screening tool assessment** – a terrestrial biodiversity specialist has been appointed.
- Animal Species Assessment – **Disputed** – covered in the terrestrial biodiversity specialist assessment. Rating medium to low.

## 6 CONFIRMATION OF SENSITIVITY

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture theme		X Confirm sensitivity		
Animal species theme		X Sensitivity to be low as assessed by terrestrial specialist		X
Aquatic biodiversity theme	X Sensitivity to be low as the proposed cultivation fields will be located outside of the buffer areas			X
Archaeological and cultural heritage theme				X Confirm sensitivity
Civil aviation theme			X Sensitivity to be low as the proposal will have no impact	X

Defence theme				<b>X</b> <b>Confirm sensitivity</b>
Palaeontology theme				<b>X</b> <b>Confirm sensitivity</b>
Plant species theme			<b>X</b> <b>Confirm sensitivity</b>	
Terrestrial biodiversity theme	<b>X</b> <b>Sensitivity rating medium</b>		<b>X</b>	

## 7 CONCLUSION OF SITE SENSIVITY VERIFICATION

The following specialist studies have been undertaken:

- Terrestrial biodiversity Assessment (including aquatic, fauna and flora) – Dr David Hoare of David Hoare Consulting (Pty) Ltd (SACNASP Registration: 400221/05);
- Agricultural specialist assessment – J. Putter (SACNASP 400212/09).