SITE SENSITIVITY VERIFICATION REPORT PROPOSED LIGHT INDUSTRIAL PARK FARM ZANDHOOGTE REMAINDER PORTION 139 TERGNIET MOSSEL BAY MUNICIPAL AREA

View of the property

Benjamin Walton for Cape Vegetation Surveys

o.b.o. the applicant Sapphire Ocean Investments (Pty) Ltd

September 2022

STATEMENT OF INDEPENDENCE

I, Benjamin Alan Walton, trading as "Cape Vegetation Surveys", in terms of section 33 of the NEMA, 1998 (Act No. 107 of 1998), as amended, hereby declare that I provide services as an independent botanical specialist and receive remuneration for services rendered for expressing a factual account of the baseline environment. I have no financial or other vested interest in the project. Botanical information contained in the report may not be copied without the author's consent.

An abridged Curriculum Vitae:

Benjamin Alan Walton

Experience: Cape Vegetation Surveys: Consulting Botanist 2017-2020

Western Cape Nature Conservation Board (CapeNature), Scientist: Land Use Advisor 2010-2017;

Department of Environmental Affairs and Development Planning, Principal Environmental Officer (George) 2008-2010;

Cape Vegetation Surveys: Consulting Botanist (Cape Town) 2006-2008;

Qualification: M.Sc. Forestry (Conservation Ecology), Stellenbosch University, 2001-2006;

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(1) Introduction and Terms of Reference

As required to compliment a potential application for environmental authorization the national web-based screening tool¹ was used to generate a screening report. The screening report lists a variety of specialist studies to be undertaken based on the data informants of the tool at the study area. This site sensitivity verification report, following ground-truthing of the site, motivates why certain specialist studies will not be required or conducted for the proposed development application.

A site inspection and meeting were held with the applicant on the 6th of September 2022 to discuss the potential development of a light industrial park at the property. The required specialist studies from the screening tool are either accepted or refuted hereunder to determine the development potential of the property and developable area.

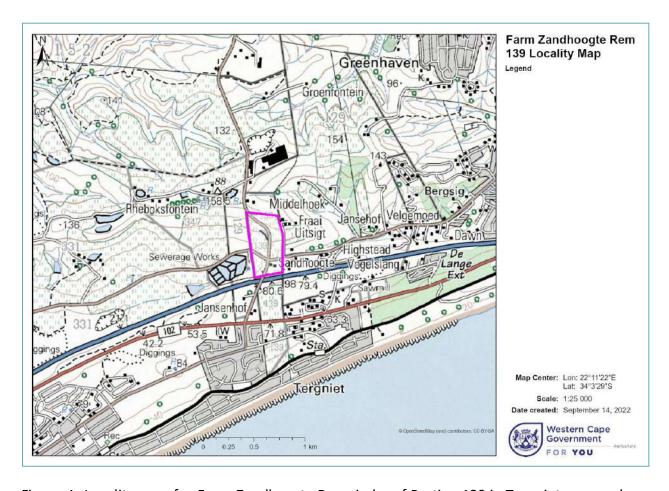


Figure 1: Locality map for Farm Zandhoogte Remainder of Portion 139 in Tergniet accessed from Sandhoogte and Sorgfontein Roads (image courtesy of Cape Farm Mapper).

¹ https://screening.environment.gov.za/screeningtool/index.html#/pages/welcome

(2) The proposed development concept at the property

Cape EAPrac environmental consultancy (independent Environmental Assessment Practitioner) and Cape Vegetation Surveys were appointed by the applicant to conduct a rapid Botancial Assessment of the property to determine the sensitivity of the site and developable area. The applicant requested to know whether a light industrial development would be supported at the property prior to its purchase. It is likely that a Basic Assessment (BA) or Environmental Impact Assessment (EIA) application process² will be required for the proposed development of a light industrial park at Farm Zandhoogte Remainder of Portion 139.

Farm Zandhoogte the Remainder of Portion 139 (18.62 ha) is zoned Agriculture Zone I and located in Tergniet and accessed from Sandhoogte and Sorgfontein Roads and is hereinafter referred to as the "property" (see Fig. 1). The applicant has not yet drafted a proposed Site Development Plan, but it is envisaged that the activity will consist of offices and storage sheds for manufacturing and packaging, and storage units.



Figure 2: Showing the property with an old farmstead ca. 2015 (image courtesy of Google Earth).

² National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014, as amended

An old homestead was demolished at the southeastern section of the property some time ago as shown on an image taken during 2015 (see Fig. 2).

The property is shown outside of the urban edge in the 2018 Municipal Spatial Development Framework (MSDF); however, it is adjacent to the Waste Water Treatment Works at west (within the 500 m buffer zone) and near Rheebok Stene at the northern extent (within the danger zone). The location of the property is unsuitable for residential development and more suitable for light industrial activities. The current updated MSDF shows that the property is within the desired urban edge for 2022 for urban expansion for mized use business and light industrial development. A large business zone just south of the National Route N2 along Sorgfontein Road has been granted an environmental authorization, providing the area for business development. The site is at the junction of Sandhoogte and Sorgfontein Roads and easily accessible to people in Midbrak requiring the use of a light industrial area.

(3) Wind & Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

One Wind and Solar development, namely a Solar Photovoltaic Facility with an approved Environmental Authorisation (EIA Reference # 14/12/16/3/3/1/1292), is 22.6 km from the proposed development area.

It is not foreseen that the proposed development will have any impact on a Solar Photovoltaic Facility.

(4) Environmental Management Frameworks relevant to the application

No intersections with Environmental Management Framework areas are found with the property.

(5) Environmental screening results and assessment outcomes

"The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected".

The application classification selected for the screening report (dated 12 September 2022) is for: Transformation of land Indigenous vegetation

(6) Relevant Development Incentives, Restrictions, Exclusions or Prohibitions

The proposed site is within <u>Strategic Gas Pipeline Corridors -Phase 2: Mossel Bay to Coega</u> and a <u>South African Conservation Area</u> (SACAD).

(7) Proposed Development Area Environmental Sensitivity

"The following summary of the development footprint environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed."

Table 1: identified environmental sensitivities

Theme	Very High Sensitivity	High Sensitivity	Medium Sensitivity	Low Sensitivity
Agricultural		x		
Animal Species		х		
Aquatic Biodiversity				х
Archaeological & Cultural Heritage				х
Civil Aviation			х	
Defence				х
Paleontology	х			
Plant Species			х	
Terrestrial Biodiversity	х			

(8) Identified Specialist assessments

"Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation."

The screening report has identified that eight (8) specialist assessments are required, as described hereunder in Table 2.

Table 2: identified specialist assessments

Number	Specialist Assessment	Assessment Protocol
1	Landscape/Visual Impact Assessment	General requirement
2	Archaeology and Cultural Heritage Impact Assessment	General requirement with NID
3	Paleontological Impact Assessment	General requirement with NID
4	Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity
5	Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity
6	Socio-Economic Assessment	General requirement
7	Plant Species Assessment	Plant Species
8	Animal Species Assessment	Animal Species

(9) Results of the verification of the environmental sensitivity of the proposed area

(9)(1) Relative Agricultural Theme Sensitivity

The screening report indicates that the receiving environment has a <u>High Relative Agricultural</u> Sensitivity.

The property had a farmstead and was utilized for agricultural purposes. Figure 3 shows the crop census taken during 2013 for planted pastures covering most of the land east of Sorgfontein Road. Thus, the receiving environment was transformed from virgin veld and cleared for agricultural use as pasturelands. The crop census data for 2017 (Fig. 4) shows that the property was used for crop production (probably grasses) north of Sandhoogte Road.



Figure 3: Showing the crop census for 2013 at the property.

Conclusion:

The property has been used for agricultural purposes conforming with the zoning to accommodate it, and thus the property is mostly transformed. No agricultural impact assessment has been identified for inclusion in the assessment process and report. The

Department of Agriculture, however, will be included in the I&AP register, and will be provided with an opportunity to provide comment.



Figure 4: Showing the crop census for 2017 at the property.

(9)(2) Relative Animal Species Theme Sensitivity

The screening report indicates that the receiving environment has a <u>High Relative Animal Species Sensitivity</u> and indicated the following features for the theme in Table 3.

Table 3: Identified Animal Species

Sensitivity	Feature(s)
High	Aves-Bradypterus sylvaticus
High	Aves-Circus ranivorus
High	Aves-Neotis denhami
High	Aves-Polemaetus bellicosus

Sensitivity	Feature(s)
Medium	Insecta-Aloeides thyra orientis
Medium	Insecta-Lepidochrysops littoralis
Medium	Sensitive species 5
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

The study area is mostly an old field with some remnant vegetation and otherwise dominated by pioneer plants and bird or mammal dispersed plant species. Animals may use the area for feeding and shelter.

It is motivated that an Animal Impact Assessment may be required.

(9)(3) Relative Aquatic Biodiversity Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Low Aquatic Biodiversity</u> <u>Sensitivity</u>.

Conclusion:

No wetlands are located at the property and only a small old earthern dam exists there. Drainage occurs in a westerly and easterly direction from the centre of property. It is motivated that an Aquatic Biodiversity Sensitivity Assessment will not be necessary to conduct for the application process.

The proposed development activities will not trigger a water use licence in terms of Section 21 (c) and (i) of the National Water Act (Act 36 of 1998). However, the proposed development application will be submitted to the Breede Gouritz Catchment Management Agency for consideration and their input.

(9)(4) Relative Archaeological and Cultural Heritage Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Low Relative</u> <u>Archaeological & Cultural Heritage Sensitivity</u>.

Conclusion:

A Notice of intent to develop (NID) will be included as a general process requirement for the application process and be sent to Heritage Western Cape to determine whether a specialist heritage study is required.

(9)(5) Relative Civil Aviation Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Medium Relative Civil</u> <u>Aviation Sensitivity</u> and indicated the following features for the theme in Table 4.

Table 4: Identified Civil Aviation features

Sensitivity	Feature(s)
High	Between 15 and 35 km from a civil aviation radar
High	Between 15 and 35 km from a major civil aviation aerodrome

Conclusion:

The proposed development application will be submitted to the Civil Aviation Authority as a general process requirement for their input.

(9)(6) Relative Defence Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Low Relative Defence</u> <u>Theme Sensitivity</u>.

Conclusion:

The proposed development application will thus not be required to be submitted to the Department of Defence.

(9)(7) Relative Palaeontology Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Very High Relative</u> <u>Paleontogy Theme Sensitivity</u>, with features of a Very High paleontological sensitivity.

Conclusion:

It is motivated that a Paleontological Impact Assessment will be conducted for inclusion in a proposed development application process.

(9)(8) Relative Plant Species Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Medium Relative Plant</u> Species Sensitivity and indicated the following features for the theme in Table 5.

Based on a rapid botanical assessment of the property the condition of the habitat is degraded for the most part (see Fig. 5) following cultivation, and the vegetation is mostly composed of pioneer and disturbance favouring plant species in secondary succession.



Figure 5: Showing the habitat condition of the property around 2018 (image courtesy of Google Earth).

The property was indicated in the national vegetation map (2006) as being within Endangered Groot Brak Dune Strandveld. The updated vegetation map (2018) shows that the property is within: Hartenbos Dune Thicket (Least Concern) at the southern extent, and within Garden Route Granite Fynbos (Critically Endangered) at the northern extent (see Fig. 6).

Table 5: Identified Plant Species

Sensitivity	Feature(s)
Medium	Lampranthus fergusoniae (not observed)
Medium	Lampranthus pauciflorus (Beach Brightfig - Endangered; possibly on site)
Medium	Lebeckia gracilis (not observed)
Medium	Leucospermum praecox (not observed)
Medium	Wahlenbergia polyantha (not observed)
Medium	Selago villicaulis (not observed)
Medium	Freesia fergusoniae (not observed)
Medium	Erica unicolor subsp. mutica
Medium	Erica glandulosa subsp. fourcade
Medium	Hermannia lavandulifolia
Medium	Sensitive species 153
Medium	Sensitive species 633
Medium	Sensitive species 268
Medium	Duvalia immaculata
Medium	Sensitive species 1024
Medium	Agathosma eriantha (not observed)
Medium	Agathosma muirii (not observed)

Sensitivity	Feature(s)
Medium	Euchaetis albertiniana (not observed)
Medium	Muraltia knysnaensis (not observed)
Medium	Sensitive species 516
Medium	Sensitive species 800
Medium	Sensitive species 500
Medium	Sensitive species 654
Medium	Diosma passerinoides (not observed)
Medium	Agathosma macrocarpa (not observed)

Conclusion:

As identified for inclusion in the assessment process and application by the screening report a Terrestrial Biodiversity Sensitivity Report will be compiled that also assesses the relative plant species theme.

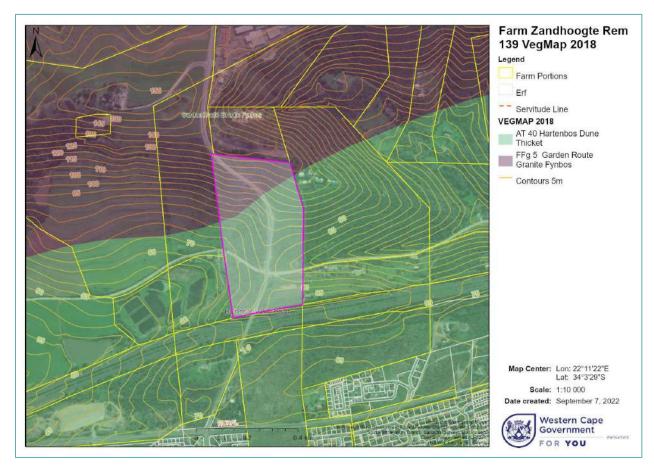


Figure 6: The property in context of the national vegetation units (2018) within Garden Route Granite Fynbos and Hartenbos Dune Thicket (image courtesy of Cape Farm Mapper).

(9)(9) Relative Terrestrial Biodiversity Theme Sensitivity

The screening report indicates that the receiving environment has a <u>Very High Terrestrial</u> <u>Biodiversity Sensitivity</u>; and indicated the following features for the theme in Table 6.

Table 6: identified Terrestrial Biodiversity features

Sensitivity	Feature(s)
Very High	Critical Biodiversity Area 1 (CBA 1)
Very High	Critical Biodiversity Area 2 (CBA 2)
Very High	Ecological Support Area 1 (ESA 1)
Very High	Ecological Support Area 2 (ESA 2)
Very High	Endangered Ecosystem



Figure 7: The property in context of the Biodiversity Spatial Plan, 2017, with the western extent mostly within a CBA and ESA (image courtesy of Cape Farm Mapper).

The features identified in Table 6 are based on the Provincial Biodiversity Spatial Plan (BSP) where the western extent is primarily within a sensitive area (see Fig. 7), viz., mostly a primary terrestrial Ecological Support Area (ESA 1) with some terrestrial Critical Biodiversity Area (CBA 1) chiefly in the northwestern extent.

The designated sensitive areas have the following specific geographic features:

- Bontebok Extended Distribution Range.
- Coastal resource protection- Eden.
- Groot Brak Dune Strandveld (EN) (VegMap 2006).
- South Strandveld Western Strandveld Channelled Valley Bottom Wetland.
- Watercourse protection- Southern Coastal Belt.

The receiving environment has been transformed due to agricultural use with a degraded habitat and a secondary succession of plant species. Most of the property is developbale based on the low sensitivity of the terrestrial biodiversity, whereas some sections have a medium

terrestrial biodiversity sensitivity (see Fig. 8). There are some areas in the north having a higher species richness with a patch of a certain succulent plant and individuals of other rare species. Based on the site inspection there are at least three plant species of special concern, namely: *Gnidia chrysophylla* (Near Threatened), *Lampranthus diutinus* (Endangered) (still to be determined); and *Hermannia lavandulifolia* (Vulnerable) (still to be determined).



Figure 8: Sensitivity map of the property (image courtesy of Google Earth).

As identified for inclusion in the assessment and application process by the screening report a Terrestrial Biodiversity Sensitivity Report will be compiled, and a detailed description and analysis of the study area completed.

Conclusion

From the findings of the site sensitivity verification, it is proposed that a Terrestrial Biodiversity Sensitivity Report be required to complement the Basic Assessment/EIA application process.

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