Johann Lanz

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# Site sensitivity verification and Agricultural Compliance Statement for NEMA 24G application for FE5 (Pty) Ltd Tented Camp

### 1 Introduction

A retrospective Environmental Authorisation is being sought for the above development. In terms of the National Environmental Management Act (Act No 107 of 1998) (NEMA) and due to the potential agricultural sensitivity of the site, the application for environmental authorisation requires an agricultural assessment.

The location of the camp development on Boschendal Wine Estate is shown in figure 1.



Figure 1. The footprint of the camp development (blue outline) on Boschendal Wine Estate.

Johann Lanz was appointed as an independent agricultural specialist to conduct the agricultural assessment. The objective and focus of an agricultural assessment is to assess whether or not the development has had an unacceptable agricultural impact or not, and based on this, to make a recommendation on whether it should be approved or not.

The aim of the protocol for the specialist assessment and minimum report content requirements of environmental impacts on agricultural resources is to preserve valuable agricultural land for agricultural production. Valuable land is considered to be predominantly scarce arable land that is suitable for the viable production of cultivated crops.

## 2 Site sensitivity verification

The screening tool classifies agricultural sensitivity according to only two independent criteria – the land capability rating and whether the land is cultivated or not. All cultivated land is classified as at least high sensitivity, based on the logic that if it is under cultivation, it is indeed suitable for cultivation, irrespective of its land capability rating.

The screening tool sensitivity categories in terms of land capability are based upon the Department of Agriculture's updated and refined, country-wide land capability mapping, released in 2016. Land capability is defined as the combination of soil, climate and terrain suitability factors for supporting rain fed agricultural production. It is an indication of what level and type of agricultural production can sustainably be achieved on any land. The higher land capability values ( $\geq$ 8 to 15) are likely to be suitable as arable land for the production of cultivated crops, while lower values are only likely to be suitable as non-arable, grazing land, or at the lowest extreme, not even suitable for grazing.

A map of the proposed development overlaid on the screening tool sensitivity is given in Figure 2. The depicted footprint of the camp in Figures 1 and 2 comprises the main body of the camp which is located in land that has never been utilised for agricultural production because of the limitations imposed by large boulders and very rocky soils. Two tents to the east are located in ex vineyard land. Vines were removed from all of the surrounding lands at this altitude before 2009 because these lands were not considered to be sufficiently suitable for quality wine production. This land is rated as high agricultural sensitivity by the screening tool because it is classified as cultivated land. It has not however been cultivated since 2014, and so should no longer be classified as cultivated.

The land capability rating of the site varies between 8 and 10. Values of 8 translate to a medium agricultural sensitivity, and values of 9 and 10 translate to a high agricultural sensitivity. However, the land capability data is modelled, small scale data that is not necessarily accurate over the detail of a small site, such as the one being assessed here.

The land capability rating of the site is disputed by this assessment. The small scale data does not capture the detail of the site, the majority of which has never been cultivated because it is

extremely limited by large boulders and very rocky soils (see Figure 3). Such soils do not justify a land capability rating of more than 7, which would translate to an agricultural sensitivity of medium.



**Figure 2.** The proposed development area (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (yellow = medium; red = high; dark red = very high).

This site sensitivity verification verifies the entire site as being of less than high agricultural sensitivity. The required level of agricultural assessment is therefore confirmed as an Agricultural Compliance Statement.

# 3 Agricultural Compliance Statement

As discussed above, most of the development impacts land that has no agricultural value and that does not therefore require conservation as agricultural production land. Theoretically, the two small footprints to the east are on land that could be considered suitable for supporting crop production. However it is important to note that the land is part of a high functioning wine estate that has absolutely no agricultural use for the impacted land, and it would not be used for agricultural production, whether the camp development was located there or not.

Because of this, the camp development does not have an unacceptable negative impact on the

agricultural production capability of the site. Therefore, from an agricultural impact point of view, it is recommended that the development be approved. The protocol requirement of confirmation that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities, is not relevant because no agricultural activities are impacted. There are no Environmental Management Programme inputs required for the protection of agricultural potential on the site.



*Figure 3. Photographs showing the bouldery land on which the camp is located.* 

The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions. In completing this statement, no assumptions have been made and there are no uncertainties or gaps in knowledge or data that are relevant to it. No further agricultural assessment of any kind is required for this application.

The required relevant experience, proving the specialist's fitness for completing this assessment, is given in the curriculum vitae overleaf.

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J. Lanz (Pr.Sci.Nat.) 10 October 2021

### Johann Lanz Curriculum Vitae

#### Education

M.Sc. (Environmental Geochemistry)	University of Cape Town	1996 - 1997
B.Sc. Agriculture (Soil Science, Chemistry)	University of Stellenbosch	1992 - 1995
BA (English, Environmental & Geographical Science)	University of Cape Town	1989 - 1991
Matric Exemption	Wynberg Boy's High School	1983

#### **Professional work experience**

I have been registered as a Professional Natural Scientist (Pri.Sci.Nat.) in the field of soil science since 2012 (registration number 400268/12) and am a member of the Soil Science Society of South Africa.

2002 - present

#### Soil & Agricultural Consulting Self employed

In the past 5 years of running my soil and agricultural consulting business, I have completed more than 120 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, urban, and agricultural developments. My regular clients include: Aurecon; CSIR; SiVEST; Arcus; SRK; Environamics; Royal Haskoning DHV; Jeffares & Green; JG Afrika; Juwi; Mainstream; Redcap; G7; Mulilo; and Tiptrans. Recent agricultural clients for soil resource evaluations and mapping include Cederberg Wines; Western Cape Department of Agriculture; Vogelfontein Citrus; De Grendel Estate; Zewenwacht Wine Estate; and Goedgedacht Olives.

In 2018 I completed a ground-breaking case study that measured the agricultural impact of existing wind farms in the Eastern Cape.

### Soil Science Consultant Agricultural Consultors International (Tinie du Preez) 1998 - 2001

Responsible for providing all aspects of a soil science technical consulting service directly to clients in the wine, fruit and environmental industries all over South Africa, and in Chile, South America.

Contracting Soil Scientist De Beers Namaqualand Mines July 1997 - Jan 1998

Completed a contract to advise soil rehabilitation and re-vegetation of mined areas.

#### **Publications**

- Lanz, J. 2012. Soil health: sustaining Stellenbosch's roots. In: M Swilling, B Sebitosi & R Loots (eds). Sustainable Stellenbosch: opening dialogues. Stellenbosch: SunMedia.
- Lanz, J. 2010. Soil health indicators: physical and chemical. *South African Fruit Journal*, April / May 2010 issue.
- Lanz, J. 2009. Soil health constraints. *South African Fruit Journal*, August / September 2009 issue.
- Lanz, J. 2009. Soil carbon research. *AgriProbe*, Department of Agriculture.
- Lanz, J. 2005. Special Report: Soils and wine quality. *Wineland Magazine*.

I am a reviewing scientist for the South African Journal of Plant and Soil.

## **DECLARATION OF THE SPECIALIST**

**Note:** Duplicate this section where there is more than one specialist.

I, Johann Lanz, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
  - other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another specialist that meets the general requirements set out in Regulation 13 have been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- in terms of the remainder of the general requirements for a specialist, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- have disclosed/will disclose, to the applicant, the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

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Signature of the specialist:

Date: 10 October 2021

Name of company: Johann Lanz – soil scientist (sole proprietor)