Johann Lanz

Soil Scientist (Pr.Sci.Nat.) Reg. no. 400268/12 Cell: 082 927 9018
e-mail: johann@johannlanz.co.za

1A Wolfe Street Wynberg 7800 Cape Town South Africa

Site sensitivity verification and Agricultural Compliance Statement for the proposed housing development on the Remainder of Portion 11 of the Farm Vaale Valley 219, Mossel Bay, Western Cape

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1 Introduction

Environmental authorisation is being sought for the above development (see locality in Figure 1). In terms of the National Environmental Management Act (Act No 107 of 1998 - NEMA), an application for environmental authorisation requires an agricultural assessment. In this case, based on the verified sensitivity of the site, the level of agricultural assessment required is an Agricultural Compliance Statement.

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

The purpose of the agricultural component in the Environmental Authorisation process is to preserve the agricultural production potential, particularly of scarce arable land, by ensuring that development does not exclude existing or potential agricultural production from such land or impact the land to the extent that its production potential is reduced. This site however no longer has agricultural production potential and so there can be no agricultural impact.



Figure 1. The locality of the property (red outline) to the north-east of Hartenbos

2 Project description

The environmental impact assessment that this agricultural statement forms part of is being conducted for an amendment of an existing Environmental Authorisation (EA) for a proposed residential development on the site. The existing EA was dated 18 August 2009. The applicant proposes to amend the approved layout. The proposed amendments will not increase the total footprint of the development, only re-align internal roads and the density of the houses.

The terms of reference for this assessment, is to assess only the potential impacts associated with these proposed changes to the project layout.

A more detailed satellite image map of the development site is shown in Figure 2.

3 Site sensitivity verification

A map of the proposed development site, overlaid on the screening tool sensitivity, is given in Figure 3. The screening tool classifies agricultural sensitivity according to only two independent criteria – the land capability rating and whether the land is cultivated or not. The land capability of the investigated site is between 4 and 8, with an average of 6 (low to moderate). Values of 4 to 5 translate to a low agricultural sensitivity and values of 6 to 8 translate to a medium agricultural

sensitivity. The classification of parts of the site as high agricultural sensitivity (red in Figure 2) is because the land is classified as cropland in the data set used by the screening tool. However that data set is outdated. The lands indicated as cropland on the screening tool are no longer used as cropland.

The screening tool sensitivity of this site has limited relevance for agricultural impact. This is because authorisation for the development granted in 2009 effectively negated the site's agricultural potential by authorising building on the agricultural land. Once the authorised land is no longer agricultural, the site has no agricultural production potential and therefore its agricultural sensitivity must be low.

This site sensitivity verification verifies the entire site as being of low agricultural sensitivity because of its non-agricultural designation and consequent lack of agricultural production potential. The required level of agricultural assessment is therefore confirmed as an Agricultural Compliance Statement.



Figure 2. More detailed satellite image map of the site.

4 Assessment of agricultural impact

The agricultural impact associated with the existing environmental authorisation was the rezoning and loss of the entire site for agricultural use that was authorised in 2009. That negated the future agricultural potential of the entire site. The changes that are now proposed to the development

layout, and are the subject of this assessment, can have no possible further agricultural impact because the land is no longer agricultural land.



Figure 3. The proposed development site overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high).

5 Agricultural Compliance Statement

An Agricultural Compliance Statement is required to indicate whether the proposed development will have an unacceptable impact on the agricultural production capability of the site. It must provide a substantiated statement on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development.

The impact of the proposed amendment to the development layout on the agricultural production capability of the site is assessed as being acceptable because, as discussed above, it will make absolutely no difference to the loss of agricultural land that was already authorised in 2009. From an agricultural impact point of view, it is therefore recommended that the amendment 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 in this case. There are also no Environmental Management Programme inputs required for the protection of agricultural potential on the site.

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.

J. Lanz (Pr. Sci.Nat.)

1 September 2022

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.

Soil & Agricultural Consulting Self employed

2002 - present

Within the past 5 years of running my soil and agricultural consulting business, I have completed more than 170 agricultural assessments (EIAs, SEAs, EMPRs) in all 9 provinces for renewable energy, mining, electrical grid infrastructure, urban, and agricultural developments. I was the appointed agricultural specialist for the nation-wide SEAs for wind and solar PV developments, electrical grid infrastructure, and gas pipelines. My regular clients include: Zutari; CSIR; SiVEST; SLR; WSP; Arcus; SRK; Environamics; Royal Haskoning DHV; ABO; Enertrag; WKN-Windcurrent; JG Afrika; 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.

Signature of the specialist:

Date: 1 September 2022

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