Johann Lanz

Soil Scientist (Pri.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 Erf numbers 103 and 104, Knysna in Wittedrift near Plettenberg Bay

Environmental authorisation is being sought for a residential development on the above properties.

The Protocol for the specialist assessment and minimum report content requirements of environmental impacts on agricultural resources, gazetted on 20 March 2020, states that:

prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration, identified by the screening tool, must be confirmed by undertaking a site sensitivity verification that confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool.

1 Site sensitivity verification

In terms of the gazetted agricultural protocol, a site sensitivity verification must be submitted that:

- 1. confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc;
- 2. contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

Agricultural sensitivity, in terms of environmental impact, and as used in the national web-based environmental screening tool, is a direct function of the capability of the land for agricultural production. The screening tool classifies agricultural sensitivity according to two criteria - the cultivation status and the land capability. All cultivated land is classified as, at least, high sensitivity, as a result of its cultivation status.

Uncultivated land is classified by the screening tools in terms of the land capability. 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 screening tool sensitivity categories for uncultivated land are based upon the Department of Agriculture's updated and refined, country-wide land capability mapping, released in 2016.

The proposed site is identified on the national web based environmental screening tool as being of predominantly medium sensitivity for agricultural resources, with a small area of low sensitivity. This is because the site's land capability evaluation values, of 5 (low) and 6-8 (medium) classify it within those sensitivity classes. A map of the proposed development area overlaid on the screening tool sensitivity is given in Figure 1.

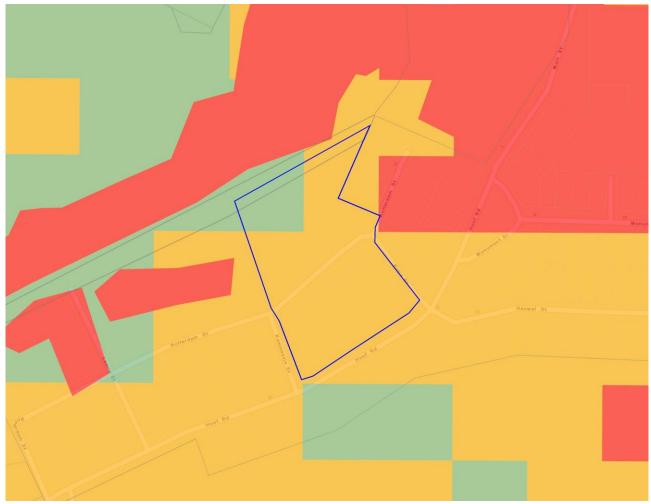


Figure 1. The proposed development area (blue outline) overlaid on agricultural sensitivity as identified by the screening tool (green = low; yellow = medium; red = high; dark red = very high).

The agricultural sensitivity, as identified by the screening tool, is confirmed by this assessment. The motivation for confirming the sensitivity is that the land type data shows the dominant soils to be shallow, duplex soils, that are depth-limited by a dense clay subsoil horizon. As a result, the land capability rating is medium to low. The site was last used for cultivated pastures in 2011 and since then has remained uncultivated. The location of the site between residential areas, is a further limitation to its potential agricultural use. A photograph of the site taken in October 2020 is shown in Figure 2.

The agricultural protocol further states:

An applicant intending to undertake an activity identified in the scope of this protocol on a site identified on the screening tool as being of medium or low sensitivity for agricultural resources must submit an Agricultural Compliance Statement

The above applies in this case.



Figure 2. A photograph across the site, showing the uncultivated status of the land.

2 Agricultural Compliance Statement

It is hereby confirmed that the site is of medium and low sensitivity for agriculture, because the dominant soils are shallow, duplex soils, that are depth-limited by a dense clay subsoil horizon, with the result that the land capability rating is medium to low. The site is not used for productive agriculture and its location between residential areas, is a further limitation to its potential agricultural use.

It is furthermore confirmed that, because of the limits to agricultural potential and use, the proposed development will 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 entire site will be excluded from agricultural use. Therefore, 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. For the same reason, there are 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.)

13 March 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.

Soil & Agricultural Consulting Self employed

2002 - present

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.