

**Site sensitivity verification  
and Agricultural Compliance Statement  
for the proposed rehabilitation of the road TR75/1 (N12 highway)  
near Oudtshoorn**

**Table of Contents**

1	Introduction.....	1
2	Project description .....	2
3	Site sensitivity verification .....	2
4	Baseline agricultural environment .....	3
5	Assessment of agricultural impact .....	4
6	Agricultural Compliance Statement .....	4
	Appendix 1: Specialist Curriculum Vitae .....	5
	Appendix 2: Declaration of the specialist .....	6
	Appendix 3: SACNASP registration certificate.....	7

**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 very low significance of the agricultural impact (see Section 5), the appropriate level of agricultural assessment is an Agricultural Compliance Statement.

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

The purpose of the agricultural component in the environmental assessment process is to preserve agricultural production potential by ensuring that development does not unnecessarily exclude existing or potential agricultural production from land, or unnecessarily impact agricultural land to the extent that its production potential is reduced. The primary focus is on preservation of the agricultural production potential of scarce, arable land. This project poses negligible threat to agricultural production potential.



**Figure 1.** The locality of the road upgrade (red line) south-east of Oudtshoorn.

## 2 Project description

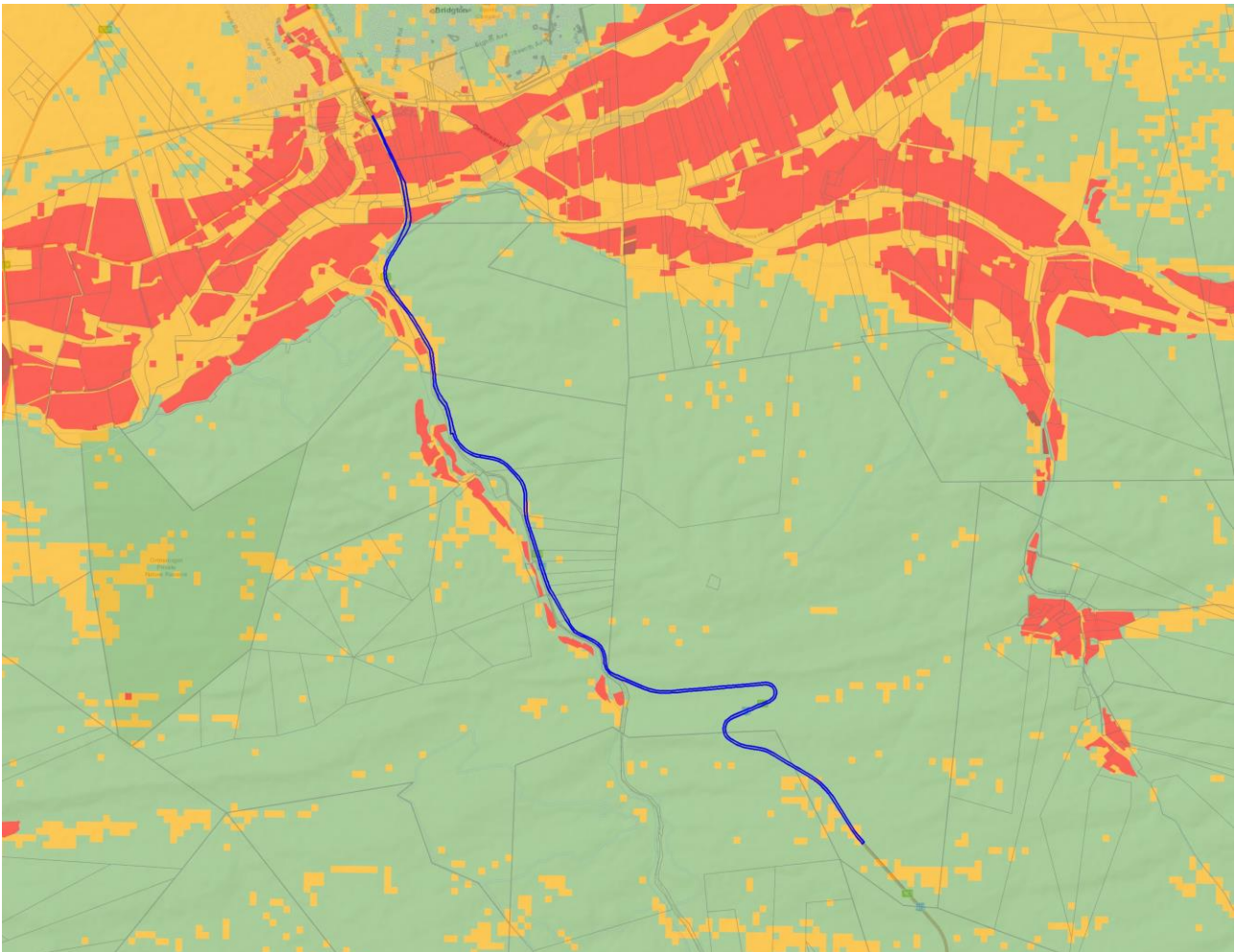
This application is for the upgrading of the existing road immediately south of Oudtshoorn for a distance of approximately 14.7 kilometres. It appears that all proposed works will be within the existing road reserve.

## 3 Site sensitivity verification

The screening tool sensitivity of the site is shown in Figure 2 but has limited relevance for agricultural impact in this case. Agricultural sensitivity is a direct function of the production potential of land. However, the screening tool classifies agricultural sensitivity according to only two independent criteria – whether the land is cropland or not and the land capability rating. The land capability rating only takes biophysical factors (soil, climate, terrain) into account and these are based on fairly coarse-scaled modelled data. However, agricultural production potential is not only a function of these things. There are other factors that influence whether a piece of land can practically deliver agricultural produce or not and which therefore influence its agricultural production potential. In this case the fact that the land is within a road reserve negates its potential for agricultural production. The sensitivity classification of the proposed development footprint by the screening tool is disputed and assessed here as being entirely of low agricultural sensitivity within the road reserve.

Even if the road upgrade is required to extend beyond the existing road reserve in places, its

proposed footprint does not impinge on any cropland and therefore will impinge, outside of the road reserve, on a maximum agricultural sensitivity of medium.



**Figure 2.** The footprint of the proposed development (blue outline) overlaid on agricultural sensitivity, as given by the screening tool (green = low; yellow = medium; red = high; dark red = very high). Note however that the screening tool sensitivity has limited relevance for the agricultural impact of this proposed development.

#### 4 Baseline agricultural environment

As discussed above, the soil, climate, and terrain are not the main limitation to agricultural production potential and are therefore of limited importance for this assessment. Generally the climate, with rainfall below 300 mm per annum (Schulze, 2009), is the main biophysical limitation. The site is very varied in terms of soil and terrain and therefore land capability which ranges from 2 (very low) to 9 (moderate-high). Agricultural land use is mostly grazing with some pasture crops in the northern part. The proposed footprint of the development however does not impinge anywhere on these pasture croplands.

## **5 Assessment of agricultural impact**

An agricultural impact is a change to the future agricultural production potential of land. The significance of the agricultural impact is directly proportional to the extent of the change in production potential. Due to the status of the land as a road reserve, it has no agricultural production potential and the development will not therefore result in any change to that potential. There is therefore zero agricultural impact. Even if the road upgrade is required to extend beyond the existing road reserve in places, its proposed footprint would only impinge on the very edge of agricultural land and would therefore have negligible impact.

## **6 Agricultural Compliance Statement**

The agricultural impact of the proposed development is assessed as being acceptable because it results in no, or at most negligible loss of future agricultural production potential. From an agricultural impact point of view, it is recommended that the development be approved.

It is hereby confirmed that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities because all impact occurs along the edges of agricultural lands. Erosion risk will be managed by the storm water management that will be an inherent part of the road engineering of the development. There are no additional Environmental Management Programme inputs required for the protection of agricultural potential.

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 below.

A handwritten signature in black ink, appearing to read 'J. Lanz', with a long horizontal stroke extending to the left.

J. Lanz (Pr. Sci.Nat.)

5 April 2023

## Appendix 1: Specialist Curriculum Vitae

### 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 Goedgeacht 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 Consultants 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*.

## Appendix 2: 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: **5 April 2023**

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

**herewith certifies that**

**Johan Lanz**

Registration Number: 400268/12

**is a registered scientist**

in terms of section 20(3) of the Natural Scientific Professions Act, 2003  
(Act 27 of 2003)  
in the following field(s) of practice (Schedule 1 of the Act)

Soil Science (Professional Natural Scientist)

Effective **15 August 2012**

Expires **31 March 2024**



Chairperson

Chief Executive Officer

