

REPORT

Environmental and Social Impact Assessment of the Proposed Malting Plant Development near Sedibeng Brewery, Gauteng Province (Ref Gaut 002/24-25/E0003)





Project related



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Classification: Project related

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1 Introduction

A NEMA Query was lodged with the Department of Agriculture, Rural Development and Environment (GDARDE) at the inception of the environmental studies (Basic Assessment - BA/Environmental and Social Impact Assessment - ESIA) regarding Activity 28 of Listing Notice 1 of the EIA Regulations 2014 (as amended) for the ESIA of the Proposed Malting Plant Development near Sedibeng Brewery. The GDARDE advised in a NEMA Interpretation Query dated 26 June 2024 that the activity be subjected to the Gauteng Province Environmental Management Framework (GPEMF) registration process due to its location in Zone 5 (Industrial and Commercial Focus Zone) (**Refer to Table 1**).

Table 1: Listing Notice 1 - Activity 28

LN and Activity	Description	Applicability
LN 1 Activity 28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: will occur inside an urban area, where the total land to be developed is bigger than 5 ha; or excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	 The site has been rezoned to industrial. Activity is excluded from the requirement to obtain an EA within Zone 5 of the GPEMF Standard. The site could have been previously used for agricultural activities.

The EAP proceeded with the BA/ESIA study and excluded Activity 28 from the BA Report/ESIA Report and the report was subject to a public review period from 19 August – 17 September 2024. Subsequent to the review period, the report was finalised and submitted to the GDARDE on 16 October 2024 for decision-making.

During the review of the Final BA/ESIA Report by the GDARDE, the Department advised that the GPEMF registration process will no longer be applicable to the Project due to the provision of Section 3(3) of the GPEMF Standard which states that if the development requires an Environmental Authorisation (EA) for any activity not excluded in terms of the standard in which case an EA must be obtained for all applicable identified activities. This means that this activity will need to be authorised through an EA process due to the above-mentioned provision.

The Department further advised that the EAP is required to undertake a public consultation notifying registered Interested and Affected Parties (I&APs) of the inclusion of the said activity for a period of 30-days. Registered I&APs, therefore have from **10 December 2024 - 31 January 2025** to raise any objections, questions, comments regarding the inclusion of Activity 28 of Listing Notice 1 as indicated above.

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1.1 Agricultural Compliance Statement

Refer to Annex A for the Agricultural Compliance Statement compiled by Dr Johann Lanz of Soil ZA.

1.1.1 Baseline Description of the Agro-ecosystem

The purpose of this section is firstly to present the baseline information that controls the agricultural production potential of the site and then, most importantly, to assess that potential. Agricultural production potential, and particularly cropping potential, is one of three factors that determines the significance of an agricultural impact, together with size of footprint and duration of impact, and it directly determines the true agricultural sensitivity of the land and therefore informs the site sensitivity verification.

Although the climate, terrain, and soil suitability may allow for viable crop production, other factors constrain the potential of the site to practically deliver agricultural produce and therefore limit its agricultural production potential. The site's zoning as 'Industrial 1' (refer to Annex B) designates the site for non-agricultural use. For this reason, the site cannot and will never be viably utilised for agricultural production and its agricultural production potential is therefore assessed here as non-existent.

The site is not within a Protected Agricultural Area (PAA) (DALRRD, 2020). A PAA is a demarcated area in which the climate, terrain, and soil are generally conducive for agricultural production and which, historically, or in a regional context, has made important contributions to the production of the various crops that are grown across South Africa. Within PAAs, the protection of viable, arable land is considered a priority for the protection of food security in South Africa.



Figure 1: Map of the proposed development footprint

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1.1.2 Site Sensitivity Verification

A specialist agricultural assessment is required to include a verification of the agricultural sensitivity of the development site as per the sensitivity categories used by the web-based environmental screening tool of the Department of Forestry, Fisheries and the Environment (DFFE). The screening tool's classification of sensitivity is merely an initial indication of what the sensitivity of a piece of land might be, as indicated by available data. What the screening tool attempts to indicate is whether the land is suitable for crop production (high and very high sensitivity) or unsuitable for crop production (low and medium sensitivity). To do this, the screening tool uses only two independent criteria, from two independent data sets, which are both indicators of suitability for crop production but are limited in that the first is outdated and the second is fairly course, modelled data which is not accurate at site scale. The two criteria are:

- 1. Whether the land is classified as cropland or not on the field crop boundary data set (Crop Estimates Consortium, 2019). All classified cropland is, by definition, either high or very high sensitivity.
- 2. Its land capability rating as per the Department of Agriculture's updated and refined, country-wide land capability mapping (DAFF, 2017)¹. Land capability is defined as the combination of soil, climate, and terrain suitability factors for supporting rain-fed agricultural production. The direct relationship between land capability rating, agricultural sensitivity, and rain-fed cropping suitability is summarised in **Table 2**.

These two inputs operate independently, and the screening tool's agricultural sensitivity is simply determined by whichever of these two gives the highest sensitivity rating. The agricultural sensitivity of the site, as classified by the screening tool, is shown in **Figure 2**. The true agricultural sensitivity of any land is equivalent to its actual suitability for crop production on the ground. The land's suitability for cropping directly determines how important it is to conserve that land as agricultural production land. Unfortunately, the screening tool does not distinguish between agricultural and non-agricultural land and can therefore show non-agricultural land as having high agricultural sensitivity, even though its actual suitability for crop production on the ground may be zero.

Table 2: Relationship between land capability, agricultural sensitivity, and rain-fed cropping suitability

Land capability	Land capability Agricultural Rain-fed cropping suitability		oing suitability
value	sensitivity	Summer rainfall areas	Winter rainfall areas
1 - 5	Low		Unsuitable
6	- Medium	Unsuitable	Offsultable
7	Wediaiii		
8 - 10	High	Suitable	Suitable
11 - 15	Very High	1	

Note: There is an error in the screening tool whereby a land capability of 8 is classified as medium sensitivity, but according to NEMA's agricultural protocol, should in fact be classified as high sensitivity. This assessment follows the agricultural protocol definition and classifies a value of 8 as high sensitivity.

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Department of Agriculture, Forestry and Fisheries (DAFF). 2017. National land capability evaluation raster data layer, 2017. Preforia



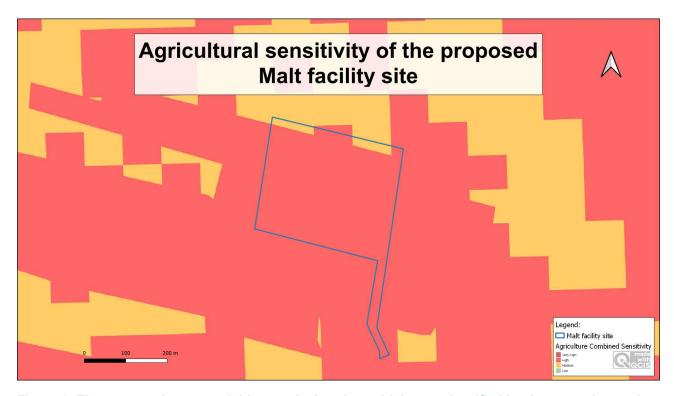


Figure 2: The assessed area overlaid on agricultural sensitivity, as classified by the screening tool

The screening tool classifies the assessed footprint as ranging from medium to high agricultural sensitivity and therefore classifies the overall site sensitivity, which is the highest sensitivity encountered across the site, as high. The screening tool's high classification is due to land capability values of 8 to 10, which in terms of **Table 2** translates to high sensitivity. However, as shown in this section, the site is not at all suitable for viable crop production and its true sensitivity, as assessed on the ground, is therefore low. This assessment therefore **disputes** the high sensitivity classification by the screening tool and verifies the entire site as being of low agricultural sensitivity.

1.2 Correction to Amount of Ammonia Stored and Utilised on Site

One of the project components namely liquid ammonia had a calculation error which was reflected as 2000m³. The correct amount of liquid ammonia that will be stored on site is 4.4m³ (**Table 3**). The vessel will be stored in a controlled environment in a separate low-occupancy building with dual-knock sensors which will trigger alarms and shut-off the equipment as required.

It should be noted that the storage and handling of ammonia does not trigger any additional activities as it is below the threshold of Activity 14 of Listing Notice 1, i.e. The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80m³ or more but not exceeding 500m³.

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Table 3: Ammonia storage

General Arrangement of Proposed Buildings	Description
	Previous Capacity Communicated
Ammonia storage	Approximately 2000m ³ .
	Corrected Capacity
Liquid Ammonia storage	Approximately 4.4m ³ .

1.3 Impact Assessment Statement

1.3.1 Agricultural Impact

It should be noted that an Agricultural Compliance Statement is not required to formally rate agricultural impacts by way of impact assessment tables.

An agricultural impact must by definition cause a change to the future agricultural production potential of land. If there is no change, there is no impact. Because the site has no current agricultural production potential due to the limitations of its zoning, the occupation of the site by the development cannot change its agricultural production potential. The development will therefore have zero agricultural impact and is therefore assessed as acceptable.

Due to its zero agricultural impact, the assessed development will not contribute to the cumulative impact. The cumulative agricultural impact of the proposed development is therefore assessed here as being of low significance and therefore as acceptable. The development will not have an unacceptable negative impact on the agricultural production capability of the area, and it is therefore recommended, from a cumulative agricultural impact perspective, that the development be approved.

1.3.2 Storage and Handling of Ammonia

The correction of the amount of liquid ammonia stored on site i.e. 4.4m³ will not result in additional negative impacts. This correction will not adversely affect the rights and interests of the I&APs.

1.4 Mitigation Measures

There are no mitigation measures recommended by the Agricultural Compliance Statement due to the site having no current agricultural production potential due to the limitations of its zoning, the occupation of the site by the development cannot change its agricultural production potential.

With regards to ammonia storage, the Environmental Management Programme (EMPr)/ Environmental and Social Management Plan (ESMP) compiled for the Project already considered and contained the impact management action plans for Spills, Incident and Pollution Prevention Control (Section 6.6) and Hazardous Substances Management (Section 6.7).

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2 Conclusion

The inclusion of Activity 28 and storage of liquid ammonia with a capacity of 4,4 m³ will not result in negative impacts or result in additional increases in emissions, waste generation, and impacts on biophysical and social environment. These proposed amendments will not adversely affect the rights and interests of the I&APs.

From an agricultural impact point of view, it is recommended that the proposed development be approved.

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ANNEXTURE A

Agricultural Compliance Statement

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SITE SENSITIVITY VERIFICATION AND AGRICULTURAL COMPLIANCE STATEMENT FOR THE PROPOSED DEVELOPMENT OF A NEW MALTING PLANT IN THE SEDIBENG DISTRICT MUNICIPALITY, GAUTENG PROVINCE

Report by Johann Lanz

10 December 2024

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EXECUTIVE SUMMARY

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to zero loss of future agricultural production potential.

The screening tool classifies the assessed footprint as ranging from medium to high agricultural sensitivity and therefore classifies the overall site sensitivity as high. This assessment disputes the high sensitivity classification by the screening tool and verifies the entire site as being of low agricultural sensitivity because of its assessed agricultural production potential.

Although the climate, terrain, and soil suitability may allow for viable crop production, the site's zoning as Industrial 1 designates the site for non-agricultural use. For this reason, the site cannot and will never be viably utilised for agricultural production and its agricultural production potential is therefore assessed here as non-existent.

An agricultural impact must by definition cause a change to the future agricultural production potential of land. If there is no change, there is no impact. Because the site has no current agricultural production potential due to the limitations of its zoning, the occupation of the site by the development cannot change its agricultural production potential. The development will therefore have zero agricultural impact and is therefore assessed as acceptable.

From an agricultural impact point of view, it is recommended that the proposed development be approved. The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions.

1 INTRODUCTION

Environmental and change of land use authorisation is being sought for the proposed development of a new malting plant in the Sedibeng District Municipality, Gauteng Province (see location 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, although the site is rated as high agricultural sensitivity by the screening tool (see Section 7), it is on land that is not utilised or zoned for agricultural production. The development therefore has minimal agricultural impact (see Section 9), and the appropriate level of agricultural assessment is therefore an Agricultural Compliance Statement.

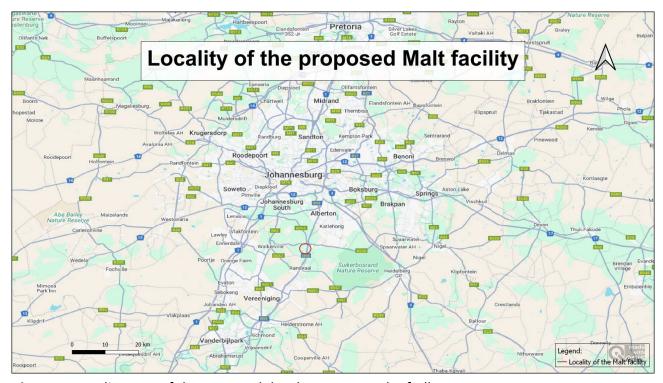


Figure 1. Locality map of the proposed development, south of Alberton.

The purpose of an agricultural assessment is to answer the question:

Will the proposed development cause a significant reduction in future agricultural production potential, and most importantly, will it result in a loss of arable land?

Section 9 of this report unpacks this question, particularly with respect to what constitutes a significant reduction. To answer the above question, it is necessary to determine the existing agricultural production potential of the land that will be impacted, and specifically whether it is viable arable land or not. This is done in Section 7 of this report. Sections 7 and 9 of this report directly address the above question and therefore contain the essence and most important part of the agricultural impact assessment.

2 PROJECT DESCRIPTION

The Project is located to the south of the Heineken Sedibeng Brewery within the Graceview Industrial Part (Erf 244 Graceview) and is a greenfield area (approximately 10ha). The project will cause the permanent exclusion of any potential future agricultural production from the site. There is no off-site agricultural impact. The design and layout of the development within the property is of no relevance to agricultural impacts.

3 TERMS OF REFERENCE

The terms of reference for this study are to fulfill the requirements of the *Protocol for the specialist* assessment and minimum report content requirements of environmental impacts on agricultural resources, gazetted on 20 March 2020 in GN 320 (in terms of Sections 24(5)(A) and (H) and 44 of NEMA, 1998).

The terms of reference for an Agricultural Compliance Statement, as stipulated in the agricultural protocol, are listed below, and the section number of this report which fulfils each stipulation is given after it in brackets.

- 1. The Agricultural Compliance Statement must be prepared by a soil scientist or agricultural specialist registered with the South African Council for Natural Scientific Professions (SACNASP) (Appendix 3).
- 2. The compliance statement must:
 - be applicable to the preferred site and proposed development footprint (Figures 2 and 3);
 - 2. confirm that the site is of "low" or "medium" sensitivity for agriculture (Section 7); and
 - 3. indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site (Section 12).
- 3. The Agricultural Compliance Statement must contain, as a minimum, the following information:
 - details and relevant experience as well as the SACNASP registration number of the soil scientist or agricultural specialist preparing the statement including a curriculum vitae (Appendix 1);
 - 2. a signed statement of independence by the specialist (Appendix 2);
 - 3. a map showing the proposed development footprint (including supporting infrastructure) with a 50 m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool (Figure 2);
 - 4. confirmation from the specialist that all reasonable measures have been taken through micro-siting to avoid or minimize fragmentation and disturbance of agricultural activities

(Section 11.1);

- 5. a substantiated statement from the soil scientist or agricultural specialist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not of the proposed development (Section 12);
- 6. any conditions to which this statement is subjected (Section 12);
- 7. in the case of a linear activity, confirmation from the agricultural specialist or soil scientist, that in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase (Section 11.2);
- 8. where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr (Section 10); and
- 9. a description of the assumptions made and any uncertainties or gaps in knowledge or data (Section 5).

4 METHODOLOGY OF STUDY

The assessment was based on an on-site investigation conducted on 12 July 2023. It was also informed by existing climate, soil, and agricultural potential data for the site (see references). The aim of the on-site assessment was to:

- Verify current cropping status and agricultural land use across the site;
- Assess agricultural conditions across the site.

An assessment of soils and long-term agricultural potential is in no way affected by the season in which the assessment is made, and therefore the date on which this assessment was done has no bearing on its results. The level of agricultural assessment is considered entirely adequate for an understanding of on-site agricultural production potential for the purposes of this assessment.

5 ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE OR DATA

There are no specific assumptions, uncertainties or gaps in knowledge or data that affect the findings of this study.

6 APPLICABLE LEGISLATION AND PERMIT REQUIREMENTS

This section identifies all applicable agricultural legislation and permit requirements over and above what is required in terms of NEMA. There should be no agricultural legislation and permit requirements because the land is zoned for industrial use and not for agriculture.

7 BASELINE DESCRIPTION OF THE AGRO-ECOSYSTEM

The purpose of this section is firstly to present the baseline information that controls the agricultural production potential of the site and then, most importantly, to assess that potential. Agricultural production potential, and particularly cropping potential, is one of three factors that determines the significance of an agricultural impact, together with size of footprint and duration of impact, and it directly determines the true agricultural sensitivity of the land and therefore informs the site sensitivity verification.

Although the climate, terrain, and soil suitability may allow for viable crop production, other factors constrain the potential of the site to practically deliver agricultural produce and therefore limit its agricultural production potential. The site's zoning as Industrial 1 designates the site for non-agricultural use. For this reason, the site cannot and will never be viably utilised for agricultural production and its agricultural production potential is therefore assessed here as non-existent.

The site is not within a Protected Agricultural Area (PAA) (DALRRD, 2020). A PAA is a demarcated area in which the climate, terrain, and soil are generally conducive for agricultural production and which, historically, or in a regional context, has made important contributions to the production of the various crops that are grown across South Africa. Within PAAs, the protection of viable, arable land is considered a priority for the protection of food security in South Africa.



Figure 2. Map of the proposed development footprint.



Figure 3. Typical site conditions.



Figure 4. Typical site conditions.



Figure 5. Typical site conditions.

8 SITE SENSITIVITY VERIFICATION

A specialist agricultural assessment is required to include a verification of the agricultural sensitivity of the development site as per the sensitivity categories used by the web-based environmental screening tool of the Department of Forestry, Fisheries and the Environment (DFFE). The screening tool's classification of sensitivity is merely an initial indication of what the sensitivity of a piece of land might be, as indicated by available data. What the screening tool attempts to indicate is whether the land is suitable for crop production (high and very high sensitivity) or unsuitable for crop production (low and medium sensitivity). To do this, the screening tool uses only two independent criteria, from two independent data sets, which are both indicators of suitability for crop production but are limited in that the first is outdated and the second is fairly course, modelled data which is not accurate at site scale. The two criteria are:

- 1. Whether the land is classified as cropland or not on the field crop boundary data set (Crop Estimates Consortium, 2019). All classified cropland is, by definition, either high or very high sensitivity.
- 2. Its land capability rating as per the Department of Agriculture's updated and refined, country-wide land capability mapping (DAFF, 2017). Land capability is defined as the combination of soil, climate, and terrain suitability factors for supporting rain-fed agricultural production. The direct relationship between land capability rating, agricultural sensitivity, and rain-fed cropping suitability is summarised by this author in Table 3.

These two inputs operate independently, and the screening tool's agricultural sensitivity is simply determined by whichever of these two gives the highest sensitivity rating. The agricultural sensitivity

of the site, as classified by the screening tool, is shown in Figure 6. The true agricultural sensitivity of any land is equivalent to its actual suitability for crop production on the ground. The land's suitability for cropping directly determines how important it is to conserve that land as agricultural production land. Unfortunately, the screening tool does not distinguish between agricultural and non-agricultural land and can therefore show non-agricultural land as having high agricultural sensitivity, even though its actual suitability for crop production on the ground may be zero.

Table 1: Relationship between land capability, agricultural sensitivity, and rain-fed cropping suitability.

Land capability	Agricultural	Rain-fed cropping suitability	
value	sensitivity	Summer rainfall areas	Winter rainfall areas
1 - 5	Low		Unsuitable
6	Medium	Unsuitable	Offsuitable
7	Wicalam		
8 - 10	High	Suitable	Suitable
11 - 15	Very High		

Note: There is an error in the screening tool whereby a land capability of 8 is classified as medium sensitivity, but according to NEMA's agricultural protocol, should in fact be classified as high sensitivity. This assessment follows the agricultural protocol definition and classifies a value of 8 as high sensitivity.

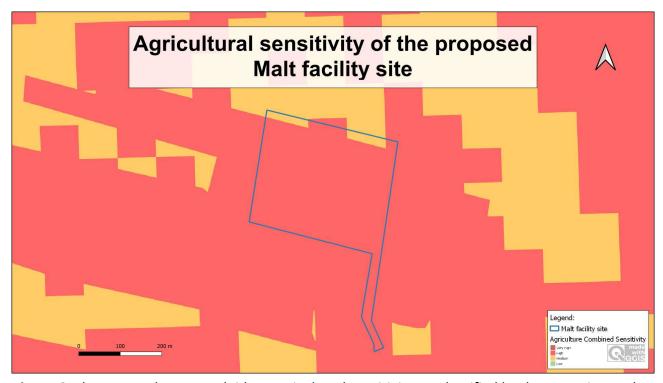


Figure 6. The assessed area overlaid on agricultural sensitivity, as classified by the screening tool.

The screening tool classifies the assessed footprint as ranging from medium to high agricultural sensitivity and therefore classifies the overall site sensitivity, which is the highest sensitivity encountered across the site, as high. The screening tool's high classification is due to land capability values of 8 to 10, which in terms of Table 1 translates to high sensitivity. However, as shown in Section 8, the site is not at all suitable for viable crop production and its true sensitivity, as assessed on the ground, is therefore low. This assessment therefore disputes the high sensitivity classification by the screening tool and verifies the entire site as being of low agricultural sensitivity.

9 ASSESSMENT OF THE AGRICULTURAL IMPACT

9.1 Impact identification and assessment

It should be noted that an Agricultural Compliance Statement is not required to formally rate agricultural impacts by way of impact assessment tables.

An agricultural impact must by definition cause a change to the future agricultural production potential of land. If there is no change, there is no impact. Because the site has no current agricultural production potential due to the limitations of its zoning, the occupation of the site by the development cannot change its agricultural production potential. The development will therefore have zero agricultural impact and is therefore assessed as acceptable.

9.2 Cumulative impact assessment

Specialist assessments for environmental authorisation are required to include an assessment of cumulative impacts. The cumulative impact of a development is the impact that development will have when its impact is added to the incremental impacts of other past, present, or reasonably foreseeable future activities that will affect the same environment. The potential cumulative agricultural impact of importance is a regional loss of future agricultural production potential.

Due to its zero agricultural impact, the assessed development will not contribute to the cumulative impact. The cumulative agricultural impact of the proposed development is therefore assessed here as being of low significance and therefore as acceptable. The development will not have an unacceptable negative impact on the agricultural production capability of the area, and it is therefore recommended, from a cumulative agricultural impact perspective, that the development be approved.

9.1 Assessment of alternatives

Specialist assessments for environmental authorisation are required to include a comparative

assessment of alternatives, including the no-go alternative. Because there is no viable cropland within the assessed site, the exact positions of all proposed infrastructure within it will make absolutely no difference to agricultural impacts. Any alternative layouts within the same assessed site will have equal agricultural impact and are assessed as equally acceptable.

The no-go alternative considers impacts that will occur to the agricultural environment in the absence of the proposed development. There are no agricultural impacts of the no-go alternative, but this is not any different from the impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

10 MITIGATION

The most important and effective mitigation of agricultural impacts for any development is avoidance of viable, potential cropland. This development has already applied this mitigation by selecting a site on which there is no viable, potential cropland. No mitigation measures are required for the protection of agricultural production potential on the site because the site is not and will not be utilised as agricultural production land.

11 ADDITIONAL ASPECTS REQUIRED IN AN AGRICULTURAL ASSESSMENT

11.1 Micro-siting

The agricultural protocol requires confirmation that all reasonable measures have been taken through micro-siting to minimize fragmentation and disturbance of agricultural activities. Because the entire site and surrounds will be non-agricultural, micro-siting will make no material difference to agricultural impacts and disturbance.

11.2 Confirmation of linear activity exclusion

If linear infrastructure has been given exclusion from complying with certain requirements of the agricultural protocol because of its linear nature, the protocol requires confirmation that the land impacted by that linear infrastructure can be returned to the current state within two years of completion of the construction phase. No such exclusion applies to this project.

12 CONCLUSION

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to zero loss of future agricultural production potential.

The screening tool classifies the assessed footprint as ranging from medium to high agricultural

sensitivity and therefore classifies the overall site sensitivity as high. This assessment disputes the high sensitivity classification by the screening tool and verifies the entire site as being of low agricultural sensitivity because of its assessed agricultural production potential.

Although the climate, terrain, and soil suitability may allow for viable crop production, the site's zoning as Industrial 1 designates the site for non-agricultural use. For this reason, the site cannot and will never be viably utilised for agricultural production and its agricultural production potential is therefore assessed here as non-existent.

An agricultural impact must by definition cause a change to the future agricultural production potential of land. If there is no change, there is no impact. Because the site has no current agricultural production potential due to the limitations of its zoning, the occupation of the site by the development cannot change its agricultural production potential. The development will therefore have zero agricultural impact and is therefore assessed as acceptable.

From an agricultural impact point of view, it is recommended that the proposed development be approved. The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions.

13 REFERENCES

Crop Estimates Consortium, 2019. Field Crop Boundary data layer, 2019. Pretoria. Department of Agriculture, Forestry and Fisheries.

Department of Agriculture, Forestry and Fisheries (DAFF). 2017. National land capability evaluation raster data layer, 2017. Pretoria.

Department of Agriculture, Land Reform and Rural Development (DALRRD). 2020. Protected agricultural areas – Spatial data layer, 2020. Pretoria.

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 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.



Private Bag X447, Pretoria, 0001, Environment House, 473 Steve Biko Road, Pretoria, 0002 Tel: +27 12 399 9000, Fax: +27 86 625 1042

APPENDIX 2: SPECIALIST DECLARATION FORM AUGUST 2023

Specialist Declaration form for assessments undertaken for application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

REPORT TITLE: PROPOSED DEVELOPMENT OF A NEW MALTING PLANT IN THE SEDIBENG DISTRICT MUNICIPALITY, GAUTENG PROVINCE

Kindly note the following:

- 1. This form must always be used for assessment that are in support of applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting, where this Department is the Competent Authority.
- 2. This form is current as of August 2023. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates are available at https://www.dffe.gov.za/documents/forms.
- 3. An electronic copy of the signed declaration form must be appended to all Draft and Final Reports submitted to the department for consideration.
- 4. The specialist must be aware of and comply with 'the Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the act, when applying for environmental authorisation GN 320/2020)', where applicable.

1. SPECIALIST INFORMATION

Title of Specialist Assessment	Agricultural Assessment
Specialist Company Name	SoilZA (sole proprietor)
Specialist Name	Johann Lanz
Specialist Identity Number	
Specialist Qualifications:	M.Sc. (Environmental Geochemistry)
Professional affiliation/registration:	
	Member of the Soil Science Society of South Africa
Physical address:	
Postal address:	
Telephone	Not applicable
Cell phone	
E-mail	

2. DECLARATION BY THE SPECIALIST

I, Johann Lanz declare that -

- I act as the independent specialist in this application;
- I am aware of the procedures and requirements for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act (NEMA), 1998, as amended, when applying for environmental authorisation which were promulgated in Government Notice No. 320 of 20 March 2020 (i.e. "the Protocols") and in Government Notice No. 1150 of 30 October 2020.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing
 - any decision to be taken with respect to the application by the competent authority; and;
 - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the NEMA Act.



Signature of the Specialist

Name of Company: SoilZA (sole proprietor)

Date: 28 November 2024

3. UNDERTAKING UNDER OATH/ AFFIRMATION

I, Johann Lanz, swear under oath that all the information submitted or to be submitted for the purposes of this application is true and correct.

Signature of the Specialist

SoilZA - sole proprietor

Name of Company

28 November 2024

Signature of the Commissioner of Oaths

2024-11-28

Date

SUID-AFRIKAANSE POLISIEDIENS HOUT BAY

2 A NOV 2024

COMMUNITY SERVICE SOUTH AFRICAN POLICE SERVICE

Project related



ANNEXTURE BLand Zoning Certificate

10 December 2024 MALTING PLANT MD6264-RHD-XX-XX-RP-X-0001

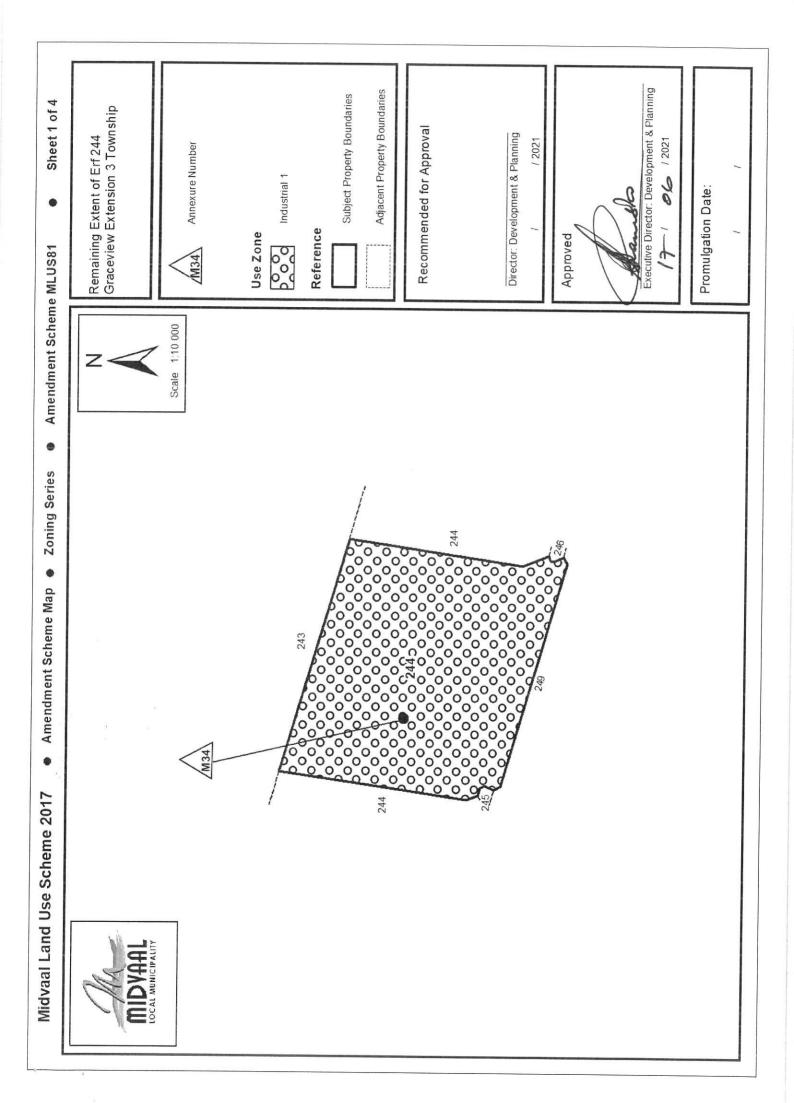
8

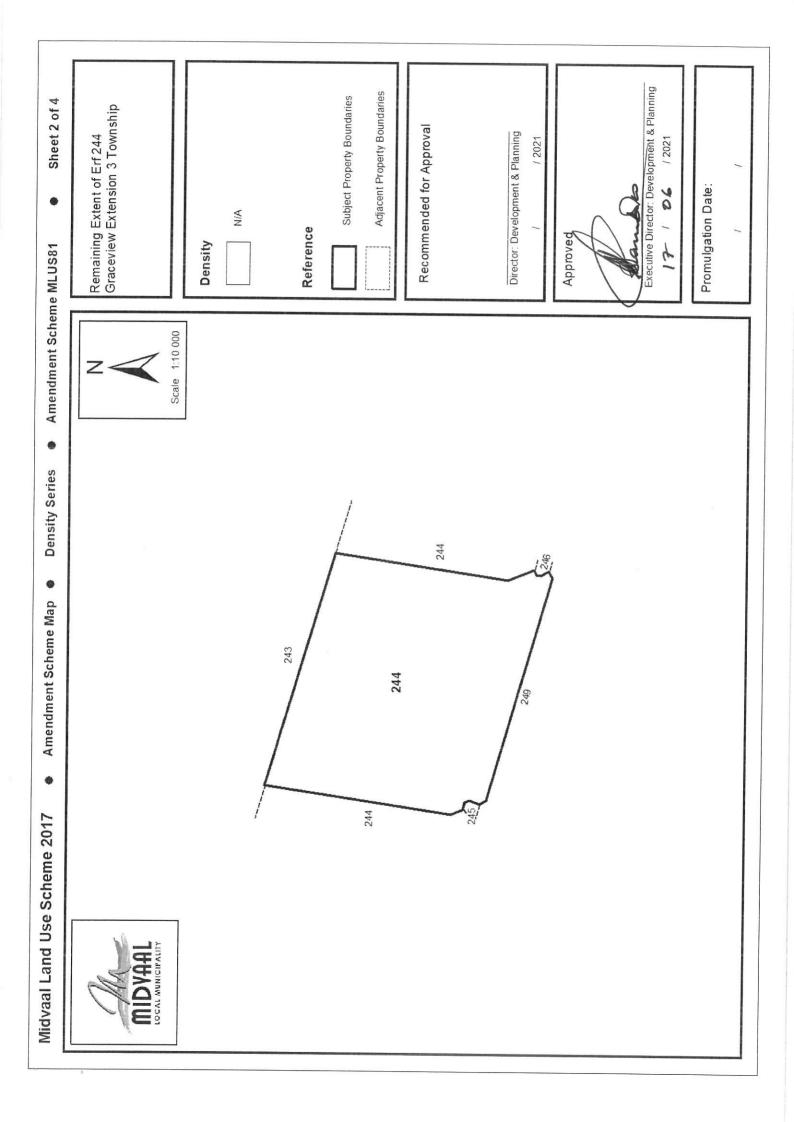
Midvaal Land Use Scheme 2017

Amendment Scheme MLUS81

The Midvaal Land Use Scheme 2017 approved by virtue of Promulgation in Provincial Gazette, Local Authority Notice 1202 dated 1st August 2018, is hereby further amended and altered as follows:

- 1. The Zoning and Density Series Maps as shown on Amendment Scheme Map, Amendment Scheme MLUS81.
- 2. By addition of Annexure M34 to the Scheme.





Amendment Scheme MLUS81 0 Annexure M34 0 Amendment Scheme Map • Midvaal Land Use Scheme 2017



In addition to the general provisions of the scheme, the property shall further be subjected to the following conditions:

1. Land Use Zone: Industrial 1

1.1 The proposed use shall be developed in accordance with the following development controls:

Industrial 1 with an annexure Use Zone

Uses

Commercial uses, place of refreshment for own employees only and with the such retail trade and industries which are subordinate and related to the main Agricultural written consent of the local authority, and Industry for a malting plant nse commercial permitted

As per Scheme Uses with

Consent or Written

Consent

As per clause 15 of The Midvaal Land Use Scheme, 2017 Parking

N/A Loading

N/A Density %09 Coverage

35 m or as per approved SDP Height

9.0 F.A. R

5m street boundary Building lines 2m side and rear boundary

16m from the road reserve boundary of the K154 and K89

20m along the P156 for single storey building and 30m for double storeys

Post-Approval Conditions: 2

- Applicant must at his cost install a water, electrical and sewer connection point to the satisfaction of the Municipality. 2.1
- of the applicant to the satisfaction of the Executive Ingress to and Egress from must be provided at the cost Director Engineering and Community Services. 2.2
- No storm water runoff may be concentrated onto adjacent erven. 2.3
- Services under roads must be installed by drilling. Road crossings will not be permitted. 2.4
- A detailed Site Development Plan inclusive of landscaping and parking layout must be submitted to Council and approved by the Executive Director: Development and Planning prior to any building plans being approved. 2.5
- shall be provided on the property to the satisfaction of paved and demarcated parking space manoeuvring area together with the necessary the local authority. Effective, 2.6
- Fully detailed building plans must be submitted for all proposed uses and structures, complying with all SABS standards. 2.7

Remaining Extent of Erf 244 Graceview Extension 3 Township

Sheet 3 of 4

Recommended for Approval

Director: Development & Planning

1 2021

Approved

Executive Director: Development & Planning / 2021 90 4

Promulgation Date:



any Ю encroach may services neighbouring properties. No internal 2.8

No construction work shall commence prior to building plan approval. 2.9

2.10 Activities should adhere to the National Health Act, 61 of 2003 and the National Environmental Management Act, 107 of 1998.

Governing General Hygiene Requirements for Food 2.11 Places of refreshment to comply with Regulations Premises, the Transport of Food related matters, Government Notice 638 of 22 June 2018. 2.12 A soil/dolomite stability report drawn by a qualified conditions of the property and recommendations as to suitable founding methods and depths or any relevant simultaneously with the submission of building plans Municipality prior to any commencement of any building operations person, acceptable to the Municipality, indicating the soil be submitted to the on the property. aspect, shall

Openserve as stipulated in their letter dated 3 2.13 Applicant to adhere to all the conditions from February 2021 under reference: STT519-20-21.

stipulated in their letter dated 29 December 2020 under reference: GOU WL_2747 2.14 Applicant to adhere to all the conditions from Eskom as

Remaining Extent of Erf 244 Graceview Extension 3 Township

Recommended for Approval

Director: Development & Planning

/ 2021

Approved

Executive Director: Development & Planning 40 / 41

Promulgation Date:



Midvaal Local Municipality PO Box 9, Meyerton, 1960 Tel: 016 360 7400 Fax: 016 360 7519 www.midvaal.gov.za

vaal.gov.za

DEVELOPMENT AND PLANNING

Enquiries: K Reddy Reference:

TO WHOM IT MAY CONCERN

ZONING CERTIFICATE

1. PROPERTY DESCRIPTION: Remaining Extent of Erf 244 Graceview Extension 3 Township

2. APPLICABLE SCHEME: Midvaal Land Use Scheme, 2023

3. USE ZONE: "Industrial 1"

4. USES PERMITTED: Commercial uses, place of refreshment for own employees only and

with the written consent of the local authority, such retail trade and industries which are subordinate and related to the main commercial

use and Agricultural Industry for a malting plant.

5. DEVELOPMENT CONTROLS:

Height - 35m or as per approved SDP

Coverage - 60%

• FAR - 0.6

Density - N/A

6. PARKING REQUIREMENTS: Refer to clause 15 of the Scheme (As per the attachment).

7. BUILDING LINE RESTRICTIONS: Street : 5 m

Side and rear : 2 m K154 and K89 : 16 m

P156 : Single storey 20m and double storey 30m

(Title Deed to be checked for any restrictions contained in conditions)

No building work shall be approved within any servitude area.

Yours faithfully



Pp_

KATLEGO MOKWENA

EXECUTIVE DIRECTOR: DEVELOPMENT AND PLANNING

DATE: 05 JULY 2024

8. GENERAL:

- 8.1. In terms of Clause 30 (2) of the Scheme, the density of 1 dwelling per 500 m² is only permitted on properties zoned Residential 1 (under previous Meyerton Town Planning Scheme, 1986) that measures 1000m² in extent, which is subject to a submission of a subdivision application to the municipality.
- 8.2. A site development plan to the satisfaction of the Local Authority shall be submitted to the Local Authority for approval prior to the submission of any building plans. Site Development plans are only applicable to high density residential, business and industrial zoned properties or as required and/or determined by the Local Authority.
- 8.3. It must be noted that the Midvaal Single Land Use Scheme and Maps are open for inspection at the Department of Development and Planning, Midvaal Local Municipality Offices Meyerton, Mitchell Street during normal working hours. The information contained herein may be verified by the applicant by inspection of the said Scheme and Map. The Council does not accept any responsibility for any incorrect information inadvertently given on this form.
- 8.4. Title conditions of some properties contain provisions relating inter alia to the following:
 - 8.4.1. Permissible uses.
 - 8.4.2 Prohibition of certain types of building construction.
 - 8.4.3 Distances of buildings from side and rear boundaries.
 - 8.4.4 Provision of on-site parking.
- 8.5. Uses prohibited in terms of any restrictive conditions in the title conditions of the property concerned do not become permissible because of any provision in the Midvaal Single Land Use Scheme, authorising such use. In such cases the applicant is advised to consult an attorney and to do likewise where a use is permissible in terms of the title conditions but is prohibited in terms of the Midvaal Single Land Use Scheme.
- 8.6. The above information is given in terms of the Land Use Management requirements only and must not be construed as indicating requirements in terms of any By-laws, the National Building Regulations, Environmental Legislation or any restrictive conditions contained in the Title Deed.
- 8.7. The Council reserves the right to alter by amendment any information herein contained. Applicants should study all title conditions before preparing development proposals.
- 8.8. In terms of Section 10 of the Midvaal Land Use Scheme all non-conforming uses will lapse at the expiry of a 15 year period calculated from the date on which the said Scheme comes into operation, in which case no compensations shall be payable.