

**DRAFT BASIC ASSESSMENT  
REPORT**

**FOR THE  
PROPOSED EXPANSION OF A  
CHICKEN LAYER FACILITY AND  
ASSOCIATED INFRASTRUCTURE ON  
PORTION 65 OF THE FARM  
GROOTVLEI 272 JR, ROOIWAL IN  
PRETORIA WITHIN THE  
JURISDICTION OF THE CITY OF  
TSHWANE METROPOLITAN  
MUNICIPALITY, GAUTENG PROVINCE**

**GAUT- 002/25-26/E0140**

**Author: Shonisani Selahle**

**Email: [shonie@scprojects.co.za](mailto:shonie@scprojects.co.za) / [admin@scprojects.co.za](mailto:admin@scprojects.co.za)**

**Contact No: 011 026 2560 / 079 614 8298**

**Address: 546 16<sup>th</sup> Road, Constantia Park, Building 2, Randjespark, 1685**

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**Client: Viomec Farm (Pty) Ltd**




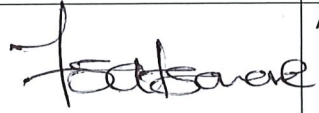
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### APPROVAL

*This document has been approved for publishing by:*

Action	Name / Designation	Signature	Date
Prepared by	<b>Sinnah Mhlongo</b>  <i>Can.Sci.Nat</i> <i>Registered CHSO</i>		August 2025
Reviewed by	<b>Shonisani Selahle</b>  <i>Pr.Sci.Nat</i> <i>Registered EAP</i> <i>Registered CHSM</i>		August 2025
Approved (internally) by	<b>Shonisani Selahle</b>  <i>Pr.Sci.Nat</i> <i>Registered EAP</i> <i>Registered CHSM</i>		August 2025
Accepted by (Viomec Farm)	<b>Tshifhiwa Tsatsawane</b>		August 2025

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6.	Gauteng Department of Defence
7.	Shubini Consulting & Management Services
8.	Interested & Affected Parties

## EXECUTIVE SUMMARY

Selahle Consultancy and Projects (Pty) Ltd (SCP) was appointed by Viomec Farm (Pty) Ltd, to undertake the Environmental Impact Assessment process for the Proposed Expansion of a Chicken Layer Facility and Associated Infrastructure in Rooiwal, Pretoria. The study area is located on Portion 65 of the Farm Grootvlei 272 JR. The proposed study area falls within the jurisdiction of the City of Tshwane Metropolitan Municipality, Gauteng Province of South Africa.

The proposed Chicken Layer Facility Expansion will entail the following:

- ±5x chicken layer houses (750 square metres each)
- 1x Borehole

The proposed study area extent is approximately 8.5 Hectares, and the proposed development footprint is approximately 1.5 Hectare. The following are the existing infrastructures on site:

- 2x accommodation Houses
- 2x Chicken Rearing House
- 1x Chicken egg-laying Facility
- Staff Changing Rooms
- 2x Toilets
- 1x Eggs Packing Facility
- 1x Borehole
- 1x Septic Tank
- 1x Reservoir
- Workshop house for small machines
- 1x Pig House
- 1x Goat House
- 6x Gates

The proposed expansion activities will include taking water from a water resource (borehole) and Waste Discharge from the Sceptic Tank and the Drying Bed for manure. As a result, this will trigger Section 21 (a) and (g) of the National Water Act (Act 36 of 1998), which constitutes the need for a Water Use License permit. Therefore, a Water Use License Application will be submitted to the Department of Water and Sanitation (DWS).

The proposed study area can be accessed through Kremetart Street at Plot 65 in Rooiwal Town. The coordinates to the site are: **25°30'37.39" S, 28°16'59.28" E**, see the locality in Figure 1 below:

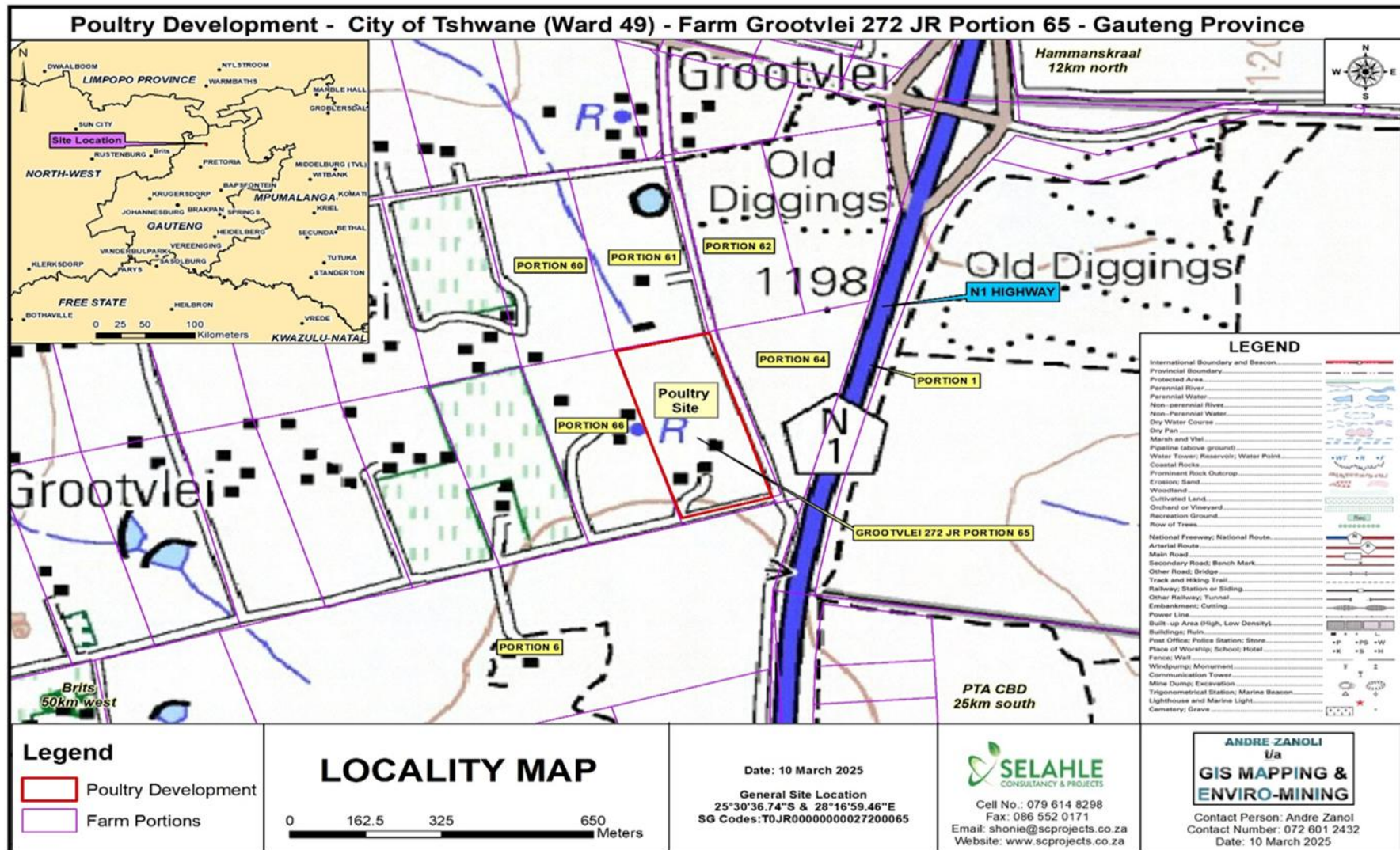


Figure 1: Site Locality Map

## **Legislative Requirements**

The most important legislation applicable to the proposed project is listed below:

- National Environmental Management Act (No. 107 of 1998) [as amended]
  - Section 28: Duty of Care and responsibilities to minimise and remediate environmental degradation.
- EIA Regulations, 2014 (Government Notices 982) [as amended]
  - The EIA regulations prescribe the manner and content of the Basic Assessment and Public Participation Processes to be followed as well as the content of the Environmental Management Programme.
- Poultry Regulations (GN 153 of 2006)
- Animal Diseases Act (Act 3 of 1984)
- 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 National Environmental Management Act, 1998, when applying for Environmental Authorisation.

## **Alternatives**

“alternatives”, in relation to a proposed activity, means different means of meeting the general purposes and requirements of the activity, which may include alternatives to –

*(a) the type of activity to be undertaken;*

The proposed development is for the Expansion of a Chicken Layer Facility, currently, it has existing infrastructures that accommodates approximately 4300 chicken layers. However, the applicant intends to expand the Poultry Farm by constructing chicken houses that will further accommodate approximately 100 000 chickens.

*(b) the technology to be used in the activity and the operational aspects of the activity*

Making use of energy-saving bulbs, installation of a water heat pump instead of individual geysers to be utilised for the office and bathroom.

## **Public Participation**

The Public Participation Process was undertaken as part of the Basic Assessment Process for the Proposed Expansion of a Chicken Layer Facility in Rooiwal. The process is undertaken to ensure compliance with the requirements in terms of the EIA Regulations, 2014 (as amended), published under the National Environmental Management Act (Act No. 107 of 1998, as amended).

The Public Participation Process commenced on 06 February 2025 until 07 March 2025 with the placement of newspaper advertisements in local newspapers. The draft Basic Assessment Report (DBAR) will be circulated amongst the Organ of State, Local Municipalities, Stakeholders and Interested and Affected Parties. A minimum period of thirty (30) days for review and comment will be afforded to all parties to comment on the BAR report.

### **Public participation process undertaken to date**

- Review period for BID documents: 06 February 2025 – 07 March 2025
- Erection of Site Notices on: 06 February 2025

- Placement of advert in the Local Newspaper: 07 February 2025
  - Pretoria North Rekord
- Distribution of Notification letters, Background Information Document (BID),
- Draft Basic Assessment Report (DBAR) to be distributed to all relevant Organs of State and Interested and Affected Parties.

### **Specialist Studies**

Three specialist studies were undertaken for the proposed development, namely; Waste Management Plan, Biosecurity Plans and Archaeological and Cultural Heritage Assessment. Below is a summary from each report:

#### **1. Waste Management Plan**

The expansion of the chicken layer facility will result in multiple waste streams, including solid chicken manure, chicken mortality, feathers, domestic and hazardous waste, construction debris, and liquid wastewater. If these wastes are not properly separated, stored, and disposed of, they pose serious environmental and public health risks. Notably, chicken manure and chicken mortality can attract flies and rodents, produce odours, and potentially contaminate surface and groundwater. The plan highlights that improper storage of manure, especially without impermeable bases or roofing, could lead to seepage and pollution. The mortality rate of chickens, if unmanaged, could contribute significantly to waste volumes and disease outbreaks. Additional concerns include inadequate record-keeping, poor signage, and a lack of training on proper waste classification and handling among workers. Fly infestations were identified as a risk due to improperly managed manure and delays in removal. Effluent from cleaning activities also poses a threat if it enters stormwater or sewer systems.

To address these issues, it is recommended that all waste be classified and separated at source, with clearly labelled bins for recyclables and hazardous materials placed around the farm. Chicken manure should be removed promptly at least once every seven days and stored in a designated facility constructed with concrete flooring, two-meter-high side walls, and a roof cover. dead bodies of the chickens must be frozen immediately and stored separately from production areas before being collected by certified contractors, while infectious mortalities should be stored in clearly marked hazardous waste freezers. In addition, pest control services must be conducted regularly by a reputable company to prevent infestations and maintain biosecurity on the farm.

Fly control measures should include daily waste removal, moisture control in manure storage, physical barriers on chicken houses, and the selective use of environmentally safe insecticides. Sanitary and hazardous waste must be handled by authorised companies, and wastewater must be directed into sealed septic tanks designed by qualified professionals. The tanks should be regularly emptied by certified service providers. Rainwater harvesting is recommended to conserve water and reduce reliance on external sources. Lastly, comprehensive waste record logs should be maintained on-site for auditing purposes, and all staff must be trained on the importance of proper waste management and environmental compliance.

#### **2. Bio-Security Plan**

The purpose of Bio-Security Plan is to prevent the spread of infectious diseases to from infected area to uninfected area and to minimize the incidence and spread of micro-organisms of public health significance. Biosecurity procedures are those taken to prevent or regulate the introduction and

spread of infectious pathogens into a flock. Such infectious agents, whether they induce clinical or subclinical disease, dramatically affect a poultry operation's production, profitability, and long-term financial viability. Biosecurity is about risk management to achieve the goals. The applicant must conduct a risk assessment to determine the amount of risk in each step of its operations and to design and execute control mechanisms suited to these levels of risk.

To ensure the security of the poultry farm the applicant should always:

- Consult with the local state veterinary doctors frequently at each production cycle for the chicken to be vaccinated.
- Ensure that all production area employees are aware of and are trained in all necessary biosecurity requirements.
- Limit human access to poultry production zones by managing vehicle, equipment, as well as to prevent livestock, wild birds, and other animals (including rodents and insects) from entering.
- Ensure that the production area personnel always wear clean clothes to work every day or on-farm apparel and footwear after removing street clothes and showering.
- Ensure that during maintenance and repairs before the maintenance team enter the sheds, their tools and personal equipment brought into the production area are decontaminated to remove dust and organic matter.
- Ensure that all visitors entering the production zone sign in and out, the records of all visitors to the poultry sheds and poultry ranges, including contractors and business workers, are always kept.
- Ensure that there is a mechanism in place for tracking delivery crew movements (for example, through delivery paperwork and feed company records).

### **3. Archaeological and Cultural Heritage Study**

The objective of Archaeological and Cultural Heritage Study is to identify the archaeological sites, cultural resources, sites associated with oral histories, graves, cultural landscapes, and any structure of historical significance that may be affected by the proposed development. The study aims to advise on mitigation measures should any sites be impacted, these mitigations will, in turn, assist the applicant in deciding on the most appropriate options in line with the National Heritage Resource Act, 1999 (Act 25 of 1999).

Vhubvo Consulting Pty Ltd was contracted to undertake Heritage Impact Assessment Phase 1. During the investigation phase, a water-related structure dating back over 60 years was identified within the proposed development site. In accordance with the National Heritage Resources Act (Act No. 25 of 1999), any structure older than 60 years is afforded automatic protection by virtue of its age. While this structure possesses heritage value, it has been assessed by the appointed heritage specialist as having medium to low local significance and is classified as a General Protected Structure (Category B: Locally Important). Although it contributes to the broader historical context of the area, it is not deemed to be of sufficient significance to prevent the proposed development from proceeding. The current development footprint is not expected to directly impact the structure. Nevertheless, it is strongly recommended that the structure be preserved in situ and not be altered, relocated, or demolished. Should any future intervention be considered, a formal permit must be obtained from the Provincial Heritage Resources Authority Gauteng (PHRAG) in compliance with applicable heritage legislation.

Although no archaeological or palaeontological materials were identified during the field survey, the possibility of subsurface heritage resources cannot be ruled out. The applicant is therefore advised to exercise caution during construction activities, particularly those involving excavation. In the event that any archaeological material such as stone tools, pottery, bone fragments, or other cultural remains is unearthed, all construction work must cease immediately within a minimum 10-meter radius of the find. The South African Heritage Resources Agency (SAHRA) must be notified without delay, and the area should be secured until a qualified heritage specialist can assess the discovery and provide further guidance.

**Environmental Assessment Practitioner's Statement:**

From an environmental point of view, the activity is considered viable, and no fatal flaw exists. It is recommended that all mitigation measures be implemented to reduce the anticipated impacts. The proposed development should be implemented within the surrounding area which will lead to an increase in the further upliftment and economic development of the area.

## **ACRONYMS & ABBREVIATIONS**

CA	Competent Authority
CBA	Critical Biodiversity Area
CRR	Comment & Response Report
DBAR	Draft Basic Assessment Report
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECA	Environment Conservation Act, 1989 No. 73 of 1989)
EMPr	Environmental Management Programme
ESA	Ecological Support Area
GDEnv	Gauteng Department of Environment
GNR	Government Notice Regulation
HIA	Heritage Impact Assessment
I&AP	Interested and Affected Party
IAP	Invasive Alien Plants
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
NDP	National Development Plan
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act, (Act No. 10 of 2004)
NFEPA	National Freshwater Ecosystem Priority Area
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NWA	National Water Act, 1998 (Act No. 36 of 1998)
PPP	Public Participation Process
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SANS	South African National Standards
SCP	Selahle Consultancy & Projects
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
WULA	Water Use License Application

## INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

The Environmental Impact Assessment (EIA) Regulations, promulgated in terms of the National Environmental Management Act (NEMA, Act no. 107 of 1998 as amended) dated 8th of December 2014, were amended in April 2017. In terms of Appendix 1 (3) of the EIA Regulations (2014 and subsequent 2017 amendments), a Basic Assessment Report (BAR) must contain the information that is necessary for the competent authority to consider and come to a decision on the application and must include –

<b>SCOPE OF ASSESSMENT &amp; CONTENT OF BASIC ASSESSMENT REPORTS</b>	
a) Details of - (i) The EAP who prepared the report; and (ii) The expertise of the EAP, including a curriculum vitae.	Page XV
b) The location of the activity, including – (i) The 21-digit Surveyor General code of each cadastral land parcel. (ii) Where available, the physical address and farm name; and (iii) Where the required information in items (i) and (ii) is not available, the coordinates of (iv) the boundary of the property or properties.	Page iv & V and Section 10
c) A plan that locates the proposed activity, or activities applied for as well as associated structures and infrastructure at an appropriate scale, or, if it is – (i) A linear activity, a description, and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) On land where the property has not been defined, the coordinates within which the (iii) activity is to be undertaken.	Section 10 & Page iv
d) A description of the scope of the proposed activity, including – (i) All listed and specified activities triggered and being applied for; and (ii) A description of the activities to be undertaken, including associated structures and (iii) infrastructure.	Section 2
e) A description of the policy and legislative context within which the development is proposed including: (i) An identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to this activity and have been considered in the preparation of the report; and (ii) How the proposed activity complies with and responds to the legislation and policy. (iii) context, plans, guidelines, tools frameworks, and instruments.	Section 2
f) A motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location.	Section 9
g) A motivation for the preferred site, activity, and technology alternative.	Section 3

## SCOPE OF ASSESSMENT & CONTENT OF BASIC ASSESSMENT REPORTS

<p>h) A full description of the process followed to reach the proposed preferred alternative within the site, including –</p> <ul style="list-style-type: none"> <li>(i) Details of all the alternatives considered.</li> <li>(ii) Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;</li> <li>(iii) A summary of the issues raised by interested and affected parties, and an indication of the way the issues were incorporated, or the reasons for not including them;</li> <li>(iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;</li> <li>(v) The impacts and risks which have informed the identification of each alternative, including the nature, significance, consequence, extent, duration and probability of such identified impacts, including the degree to which these impacts –</li> <li>(vi) aa. Can be reversed.</li> <li>(vii) bb. May cause irreplaceable loss of resources, and cc. Can be avoided, managed or mitigated;</li> </ul>	<p>Section 3, 20, 23</p>
<ul style="list-style-type: none"> <li>(viii) The methodology used in identifying and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated</li> <li>(ix) with the alternatives;</li> <li>(x) Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on geographical, physical, biological, social, economic, heritage and cultural aspects;</li> <li>(xi) The possible mitigation measures that could be applied and level of residual risk;</li> <li>(xii) The outcome of the site selection matrix;</li> <li>(xiii) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and</li> <li>(xiv) A concluding statement indicating the preferred alternatives, including the preferred</li> <li>(xv) location of the activity.</li> </ul>	<p>Section 3, Section 29</p>
<p>i) A full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including –</p> <ul style="list-style-type: none"> <li>(i) A description of all environmental issues and risks that were identified during the environmental impact assessment process; and</li> <li>(ii) An assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation</li> <li>(iii) measures.</li> </ul>	<p>Section 3, Section 29</p>

## SCOPE OF ASSESSMENT & CONTENT OF BASIC ASSESSMENT REPORTS

<p>j) An assessment of each identified potentially significant impact and risk, including –</p> <ul style="list-style-type: none"> <li>(i) Cumulative impacts;</li> <li>(ii) The nature, significance and consequences of the impact and risk;</li> <li>(iii) The extent and duration of the impact and risk;</li> <li>(iv) The probability of the impact and risk occurring;</li> <li>(v) The degree to which the impact and risk can be reversed;</li> <li>(vi) The degree to which the impact and risk may cause irreplaceable loss of resources; and</li> <li>(vii) The degree to which the impact and risk can be avoided, managed or mitigated.</li> </ul>	<p>Section 29, 32,35</p>
<p>k) Where applicable, a summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final report.</p>	<p>Page Vii</p>
<p>l) An environmental impact statement which contains –</p> <ul style="list-style-type: none"> <li>(i) A summary of the key findings of the environmental impact assessment;</li> <li>(ii) A map at an appropriate scale that superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and</li> <li>(iii) A summary of the positive and negative impacts and risks of the proposed activity and</li> <li>(iv) identified alternatives.</li> </ul>	<p>Section 35</p>
<p>m) Based on the assessment, and where applicable, impact management measures from specialist reports, the recording of the proposed impact management outcomes for inclusion in the EMPr.</p>	<p>Section 29, 32,35</p>
<p>n) Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of the authorisation.</p>	<p>Section 29, 32,35</p>
<p>o) A description of any assumptions, uncertainties, and gaps in knowledge which relate to the assessment and mitigation measures proposed.</p>	<p>Section 29, 32,35</p>
<p>p) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.</p>	<p>Section 35, 38</p>
<p>q) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded, and the post-construction monitoring requirements finalised.</p>	<p>Section 32,35, 37</p>
<p>r) An undertaking under oath or affirmation by the EAP in relation to –</p> <ul style="list-style-type: none"> <li>(i) The correctness of the information provided in the reports;</li> <li>(ii) The inclusion of comments and inputs from stakeholders and I&amp;APs;</li> <li>(iii) The inclusion of inputs and recommendations from the specialist reports where relevant; and</li> <li>(iv) Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected</li> <li>(v) parties.</li> </ul>	<p>Appendix 1</p>
<p>s) Where applicable, details of any financial provision for the rehabilitation, closure, and ongoing post-decommissioning management of negative environmental impacts.</p>	<p>N/A</p>

<b>SCOPE OF ASSESSMENT &amp; CONTENT OF BASIC ASSESSMENT REPORTS</b>	
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t) Any specific information that may be required by the competent authority.	N/A
u) Any other matters required in terms of section 24 (4)(a) and (b) of the Act.	N/A

## DETAILS OF THE EAP

Table 1: Details of EAP

<b>Name of the Environmental Assessment Practitioner</b>	Shonisani Selahle
<b>Tel No:</b>	011 026 2560 / 079 569 5277
<b>Fax No:</b>	086 685 9567
<b>Email:</b>	<a href="mailto:shonie@scprojects.co.za">shonie@scprojects.co.za</a> / <a href="mailto:admin@scprojects.co.za">admin@scprojects.co.za</a>

## EXPERTISE OF THE EAP

- EAPASA Registered EAP: 2020/2646
- SACNASP Registered Scientist: 134271
- SACPCMP Registered Safety Manager: CHSM/1372/2025

### Qualifications

- BSc Honours in Environmental Management - (UNISA) 2025
- N. Dip in Geology – (TUT) 2010
- NOSA, Implementation of ISO 45001:2018 & ISO 14001:2015

### Summary of the EAP's experience

Shonisani Selahle is an Environmental Consultant with more than 14 years of experience in applying the principles of Integrated Environmental Management and in applying the Environmental Legislation to several development projects and initiatives in Southern Africa. She has coordinated and managed several diverse projects and programs related to the Environment and Waste within both the public and private sectors for national and international companies. She has a great understanding of relevant legislation about environment management (NEMA, ECA, NWA, MPRDA, etc).

### Curriculum Vitae Shonisani Selahle

- Ability to carry out international environmental legislation research to interpret and incorporate it in proposals/EIAs/Bas.
- Understanding and implementation of World Bank Guidelines and Equator Principles into EIA reports.
- Technicalities of EIA Guidelines (Pre-consultation; Exemption of Environmental Authorisation, Environmental Screening Studies, Feasibility Studies, Fatal Flaw Studies, Basic Assessment, EIA, Scoping, EIA Public Participation and Appeals).
- Ability to undertake Environmental Authorisation Amendments (Minor and Substantive) Application.
- Ability to carry out Occupational Health and Safety Compliance Monitoring and Audits in terms of the Occupational Health and Safety Act and Construction Regulations.

- Ability to do EIA Reports independently and incorporate specialist input into reports.
- Ability to compile Environmental Management Plans.
- Ability to coordinate Public Participation from call to register to compile issues and response Reports.
- Ability to undertake EIA's/BAs for Renewable energy projects.
- Ability to carry out Environmental Control Officer (ECO) duties (site inspection and site/client auditing) and work independently.
- Ability to liaise with clients and authorities.
- Ability to undertake site rehabilitation using Bioremediation methods for contaminated sites,
- Ability to carry out Occupational Health and Safety Audits.
- Ability to apply Construction Health and Safety Permits with swift responses from the Department of Employment and Labour.
- Ability to implement ISO 45001:2018 and ISO 18001:2015 standards per project description for companies.

# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	iv
INFORMATION REQUIRED BY THE COMPETENT AUTHORITY .....	xi
Details of the EAP .....	xv
Expertise of the EAP.....	xv
Section A: Activity information.....	6
1 Proposal or Development DESCRIPTION.....	6
2 Applicable legislation, policies and/or guidelines .....	6
3 ALTERNATIVES.....	9
4 Physical size of the activity.....	11
5 Site Access .....	12
6 LAYOUT OR ROUTE PLAN.....	13
7 Site photographs.....	16
8 FACILITY ILLUSTRATION .....	16
Section b: description of receiving environment .....	17
9 PROPERTY DESCRIPTION .....	17
10 Activity POSITION .....	18
11 GRADIENT OF THE SITE.....	18
12 location in landscape.....	18
13 Groundwater, Soil and Geological stability of the site.....	18
14 Agriculture .....	19
15 Groundcover .....	19
16 Land use character of surrounding area .....	23
16NORTH.....	23
16WEST .....	23
16EAST .....	23
17 SOCIO-ECONOMIC CONTEXT .....	24
18 Cultural/Historical Features .....	25
19 Section C : public participation (Section 41).....	27
20 The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014. ....	27
21 LOCAL AUTHORITY PARTICIPATION.....	27
22 CONSULTATION WITH OTHER STAKEHOLDERS.....	28
23 GENERAL PUBLIC PARTICIPATION REQUIREMENTS.....	28
24 APPENDICES FOR PUBLIC PARTICIPATION .....	29
Section D: resource use and process details .....	29
1 Waste, effluent, and emission management.....	30
2 WATER USE.....	32
3 POWER SUPPLY.....	33
4 ENERGY EFFICIENCY .....	33
Section E: impact assessment .....	33
1 Issues raised by interested and affected parties .....	33
2 Impacts that may result from the CONSTRUCTION and operational PHASE.....	34
3 Impacts that may result from the decommissioning and closure phase.....	59
4 Cumulative impacts .....	60
5 Environmental impact statement.....	60
6 IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE ..	62

7	Spatial development tools .....	63
8	Recommendation of the practitioner.....	64
9	The needs and desirability of the proposed development (as per notice 792 of 2012, or the updated version of this guideline) .....	65
10	the period for which the environmental authorisation is required ( <i>consider when the activity is expected to be concluded</i> ) .....	66
11	ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) (must include post construction monitoring requirements and when these will be concluded.).....	67
	Section F: Appendixes .....	68
	CHECKLIST.....	68

**List of Figures**

Figure 1: Site Locality Map .....	v
Figure 2: Chicken Layer Facility Expansion Locality Map.....	15
Figure 3: The Sensitivity Map of the Proposed Expansion Chicken Facility .....	22



## **Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014 (Version 1/2022)**

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Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.
2. This template is current as of April 2022. It is the responsibility of the EAP to ascertain whether subsequent versions of the template have been published or produced by the competent authority.
3. A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.
4. **A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority (uploaded to the EIA online system) empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application. The EIA online system can be accessed at <https://eia.gauteng.gov.za>.**
- 5.
6. **A copy (PDF) of the final report and attachments must be uploaded to the EIA online system. The EIA online system can be accessed at <https://eia.gauteng.gov.za>.**
7. **Draft and final reports submitted in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) must be emailed to [environmentsue@gauteng.gov.za](mailto:environmentsue@gauteng.gov.za).**
8. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
9. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
10. An incomplete report may lead to an application for environmental authorisation or Waste Management License being refused.
11. Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorization or Waste Management License being refused.
12. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation or Waste Management License being refused.

13. The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 10 days of receipt of the application.
14. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.
15. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

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### **DEPARTMENTAL DETAILS**

Gauteng Department of Agriculture and Rural Development  
Attention: Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch  
P.O. Box 8769  
Johannesburg  
2000

Ground floor, Umnotho House, 56 Eloff Street, Johannesburg  
Administrative Unit telephone number: (011) 240 3051/3052  
Department central telephone number: (011) 240 2500

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(For official use only)

<b>NEAS Reference Number:</b>						
<b>File Reference Number:</b>						
<b>Application Number:</b>						
<b>Date Received:</b>						

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

This BAR will be submitted within the legislated timeframe.

Is a closure plan applicable for this application and has it been included in this report?

if not, state reasons for not including the closure plan.

This application is for the expansion of a chicken layer facility, which will exist for the foreseeable future; therefore, a closure plan is not applicable in this case.

Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity?

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person?

If no, state reasons for not attaching the list.

N/A

Have State Departments including the competent authority commented?

If no, why?

This Draft BA Report is currently being released for a 30-day review period. Following the review period, any comments received will be incorporated into the Final BA Report, which will be submitted to the Gauteng Department of Environment (GDEnv) for decision-making. An application for EA, as well as the relevant public participation Process documentation accompany the release of this Draft BA Report.

## SECTION A: ACTIVITY INFORMATION

### 1 PROPOSAL OR DEVELOPMENT DESCRIPTION

Project title (must be the same name as per application form):

The Proposed expansion of a Chicken Layer Facility and associated Infrastructure on Portion 65 of The Farm Grootvlei 272 JR, Rooiwal in Pretoria within the jurisdiction of City of Tshwane Metropolitan Municipality, Gauteng Province.

Select the appropriate box

The application is for an upgrade of an existing development

The application is for a new development

Other, specify

Does the activity also require any authorisation other than NEMA EIA authorisation?

YES

If yes, describe the legislation and the Competent Authority administering such legislation

Water Use License/ General Authorisation from the Department of Water and Sanitation

If yes, have you applied for the authorisation(s)?

Yes

If yes, have you received approval(s)? (attach in appropriate appendix)

NO

### 2 APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	National & Provincial	1998
Section 28 of the Town Planning & Townships Ordinance	National	1986
National Heritage Resources Act 25 of 1999	SAHRA	2000
National Water Act (Act No: 36 of 1998)	DWA	1998

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
Occupational Health and Safety Act (Act No: 58 of 1993)	National & Provincial	2014
National Environmental Management Act: Air Quality, 2004	National & Local Government	2004
National Environmental Management Act: Biodiversity Act (Act No: 10 of 2004)	National and Provincial	2004
Minimum Requirements for Biodiversity Assessments.	Provincial	2014
DEA Guidelines on Public Participation	National (DFFE)	2012
DEA Guidelines on Need and Desirability	National (DFFE)	2004
DEA Guidelines on Alternatives	National (DFFE)	2004
Poultry Regulations (GN 153 of 2006)		2006
Animal Diseases Act (Act 3 of 1984)		1934
Animal Protection Act (Act 71 of 1962)		1962

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy or guideline	Description of compliance
National Environmental Management Act No.107 of 1998 as amended.	<p>A Basic Assessment process is required to obtain authorisation for the activities, as per the EIA Regulations (2014) promulgated in terms of NEMA.</p> <p>The proposed development triggers Activity No. 27 &amp; 40 of Listing Notice 1 of the Environmental Impact Assessment Regulations, 2014 (as amended), published under the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998, as amended).</p> <p>Listing Notice 1, Activity 27 states:  <i>“The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation,.”</i></p> <p>The proposed construction of the poultry farm will result in the clearance of more than 1 hectare of indigenous vegetation.</p> <p>Listing Notice 1, Activity 40 states:  <i>“The expansion and related operation of facilities for the concentration of poultry, excluding chicks younger than 20 days, where the capacity of the</i></p>

	<p><i>facility will be increased by- (ii) more than 5 000 poultry per facility situated outside an urban area.”</i></p> <p>The proposed project entails the construction of +- 5 chicken houses of approximately 14 x 40 m (750 sqm) each. When combined, the chicken facility will accommodate a maximum of 100 000 chickens.</p> <p>The information provided in this report, is to assess the development within the guideline’s provided by the NEMA Act and enable the competent authority to make a sound decision regarding the proposed development.</p>
Municipal Systems Act, 2000 (Act 32 of 2000)	By-Laws, Policies and Legislation would be adhered with.
National Heritage Resources Act, 1999 (25 of 1999)	The SAHRA is the relevant competent authority for protection of archaeological and paleontological resources. The heritage study was conducted, and a borehole that was built in 1965 was observed on site.
National Water Act (Act No: 36 of 1998)	This act aims to ensure that the nation’s water resources are protected, used, developed, conserved, managed, and controlled in a sustainable and equitable manner for the benefit of all people in South Africa. A Water use License is underway for the registration of a Borehole and the Sceptic Tank.
National Environmental Management Act: Air Quality, 2004	During the construction phase, there will be dust that will be generated and
National Environmental Management Act: Biodiversity Act (Act No: 10 of 2004)	Although it is not anticipated, rare or protected species may be affected during construction works. The NEMBA lists flora and fauna species that are threatened and requiring protection to ensure their survival in the wild, while regulating activities which may have a potential negative impact on their long-term survival.
Minimum Requirements for Biodiversity Assessments.	Since the area is transformed and the guidelines does not make any provision to accommodate the submission of the Compliance Statement as per the National Protocols for Biodiversity assessments, a compliance statement will be done since the site indicated low sensitivity after the desktop and site verification was done.
DEA Guidelines on Public Participation	Public participation was undertaken in accordance with the EIA regulations 2014, as amended prior to

	the submission of this report to the competent authority.
DEA Guidelines on Need and Desirability	The need and desirability of this activity is discussed in this basic assessment report.
DEA Guidelines on Alternatives	According to the regulations and this guideline, it is mandatory to investigate different alternatives and the no-go option as part of the assessment.

The current operations of the chicken layer have existing infrastructure that accommodates approximately 4300 chickens to date. The existing infrastructures are as follows:

- 2x accommodation Houses
- 2x Chicken Rearing House
- 1x Chicken egg-laying Facility
- Staff Changing Rooms
- 2x Toilets
- 1x Eggs Packing Facility
- 1x Borehole
- 1x Septic Tank
- 1x Reservoir
- Workshop house for small machines
- 1x Pig House
- 1x Goat House
- 6x Gates

However, the applicant intends to construct more chicken layer facilities that will accommodate approximately  $\pm 100\ 000$  chickens on a site measuring approximately 8.5 hectares in extent. The proposed development footprint is approximately 1.5 Hectares. The proposal will include the following infrastructure:

- $\pm 5x$  chicken layer houses
- 1x Borehole

### 3 ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must, in all cases, be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not include the no-go option in the alternative table below.**

**Note:** After receipt of this report, the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

The study area for the proposed expansion of a Chicken Layer Facility was chosen because it is located within the agricultural area according to the Environmental Management Framework (EMF) and the Spatial Development Framework, which is dominated by farming activities. The site is surrounded by agricultural activities and related zoning, which makes it suitable for a poultry farm to operate properly without impacting any human activities.

Provide a description of the alternatives considered

No.	Alternative type, either alternative: site on property, properties, activity, design, technology, energy, operational or other (provide details of "other")	Description
1	Proposal (Preferred Alternative)	<p>The applicant proposes to expand their Chicken Layer Facility and associated Infrastructure in Rooiwal town, located in Pretoria. The proposed expansion is intended to accommodate approximately ±100 000 chickens on a site measuring approximately 8.5 hectares in extent. The proposed development footprint is approximately 1.5 Hectares. The proposal will include the following infrastructure:</p> <ul style="list-style-type: none"> <li>▪ ±5x chicken layer houses (750 sqm each)</li> <li>▪ 1x Boreholes</li> </ul> <p>The current operations of the chicken layer facility have existing infrastructure that accommodates approximately 4300 chickens to date. The existing infrastructures are as follows:</p> <ul style="list-style-type: none"> <li>▪ 2x accommodation Houses</li> <li>▪ 1x Chicken Rearing House</li> <li>▪ 1x Chicken egg-laying Facility</li> <li>▪ Staff Changing Rooms</li> <li>▪ 2x Toilets</li> <li>▪ 1x Eggs Packing Facility</li> <li>▪ 1x Borehole</li> <li>▪ 1x Septic Tank</li> <li>▪ 1x Reservoir</li> <li>▪ Workshop house for small machines</li> <li>▪ 1x Pig House</li> <li>▪ 1x Goat House</li> </ul>

		<ul style="list-style-type: none"> <li>6x Gate</li> </ul>
2	Location Alternative	Due to the fact that there is an existing enterprise on the site, there have been no alternative properties or locations identified for the proposed project. Therefore, this is the only site the applicant can perform the proposed activities, and it would not be economically feasible for the business to find and or purchase new property. Therefore, no alternate properties have been investigated for this application.
3	Design Alternative	The layout of the chicken layer facility is focused on the biosecurity measure, which allows for more effective management of chicken layer production as it lessens the risk of the chickens' catching diseases if the activity were to be an open environment.
4	Technology Alternative	Energy saving techniques will be adopted such as the use of energy saving light as well as the water heat pumps instead of the geysers in the workers showers.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

No site and activity alternative has been considered as the proposal is to expand the activities currently taking place. Furthermore, the site is owned by the applicant. The area is zoned as agricultural. The proposed activity will not result in major disturbances or changes to the receiving environment as the study area is already largely disturbed and developed.

## 4 PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	<b>Size of the activity:</b>
Proposed activity ( <b><i>Total environmental (landscaping, parking, etc.) and the building footprint</i></b> )	1.5 Hectares
<b>Alternatives:</b>	
Alternative 1 (if any)	N/A
Alternative 2 (if any)	N/A
	Ha/ m <sup>2</sup>

or, for linear activities:

	<b>Length of the activity:</b>
Proposed activity	N/A
<b>Alternatives:</b>	
Alternative 1 (if any)	N/A
Alternative 2 (if any)	N/A

m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Proposed activity	Ha
<b>Alternatives:</b>	
Alternative 1 (if any)	N/A
Alternative 2 (if any)	N/A
	Ha/m <sup>2</sup>

## 5 SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	YES
If NO, what is the distance over which a new access road will be built	N/A

Describe the type of access road planned:

The proposed study area can be accessed through Kremetart Street and unnamed gravel road in Rooiwal Town.

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 1

Does ready access to the site exist, or is access directly from an existing road?	
If NO, what is the distance over which a new access road will be built	Yes

Describe the type of access road planned:

The proposed study area can be accessed through Kremetart Street and unnamed gravel road in Rooiwal Town.

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	
If NO, what is the distance over which a new access road will be built	Yes

Describe the type of access road planned:

The proposed study area can be accessed through Kremetart Street and unnamed gravel road in Rooiwal Town.

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

**PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives**

Section A 6-8 has been duplicated  Number of times

(only complete when applicable)

## 6 LAYOUT OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);
- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

### **FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)**

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map;
- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

Locality and Layout maps are appended as Appendix 1.



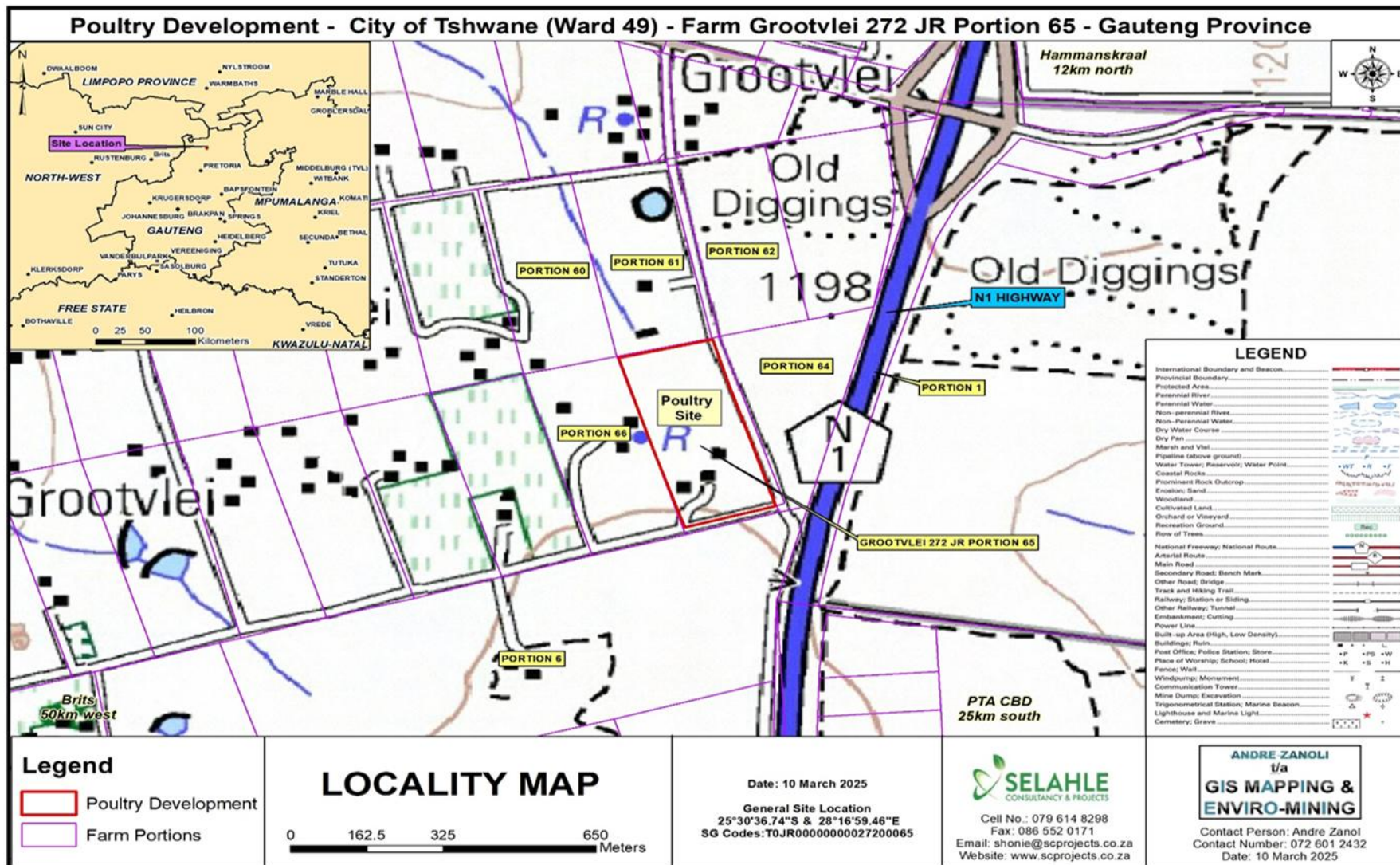


Figure 2: Chicken Layer Facility Expansion Locality Map

## 7 SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix. It should be supplemented with additional photographs of relevant features on the site, where applicable.

Site Photographs are appended hereto as Appendix 2.

## 8 FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

Facility illustrations of the proposed development are appended hereto as Appendix 3

## SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

**Note:** Complete Section B for the proposal and alternative(s) (if necessary)

### Instructions for completion of Section B for linear activities

- 1) For linear activities (pipelines etc.) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of  times  
the route

### Instructions for completion of Section B for location/route alternatives

- 1) For each location/route alternative identified the entire Section B needs to be completed
- 2) Each alternative location/route needs to be clearly indicated at the top of the next page
- 3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives  times (complete only when appropriate)

### Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route  (complete only when appropriate for above)

Section B – Location/route Alternative No.  (complete only when appropriate for above)

## 9 PROPERTY DESCRIPTION

<b>Property description:</b> (Including Physical Address and Farm name, portion etc.)	The proposed study area is located on Portion 65 of the Farm Grootvlei 272 JR at Rooiwal within the jurisdiction of the City of Tshwane Metropolitan Municipality, Gauteng Province in South Africa. The physical address of the proposed development is 65 Kremetart Street, Grootvlei, Pretoria 2000.
--	---

## 10 ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

**Alternative:**

**Latitude (S):**

**Longitude (E):**

25°30'37.39"S

28°16'59.28"E

**In the case of linear activities:**

**Alternative:**

- Starting point of the activity
- Middle point of the activity
- End point of the activity

**Latitude (S):**

**Longitude (E):**

	°		°
	°		°
	°		°

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached

The 21 digit Surveyor General code of each cadastral land parcel

<b>PROPOSAL</b>	T	0	J	R	0	0	0	0	0	0	0	0	0	0	2	7	2	0	0	0	6	5
etc.																						

## 11 GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	1:50 – 1:20 <b>X</b>	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
------	-------------------------	-------------	-------------	--------------	-------------	------------------

## 12 LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	<b>Plain X</b>	Undulating plain/low hills	River front
-----------	---------	--------------------------	--------	--------------------	----------------------------	-------------

## 13 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)

Dolomite, sinkhole or doline areas

	NO
	NO

- Seasonally wet soils (often close to water bodies)
- Unstable rocky slopes or steep slopes with loose soil
- Dispersive soils (soils that dissolve in water)
- Soils with high clay content (clay fraction more than 40%)
- Any other unstable soil or geological feature
- An area sensitive to erosion

	NO
	NO
	NO
	NO
	NO
YES	

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s)

	NO
--	----

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

°	°
---	---

c) are any caves located within a 300m radius of the site(s)

	NO
--	----

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

°	°
---	---

d) are any sinkholes located within a 300m radius of the site(s)

	NO
--	----

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

**Latitude (S):**

**Longitude (E):**

°	°
---	---

If any of the answers to the above are “YES” or “unsure”, specialist input may be requested by the Department.

## 14 AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?

YES	
-----	--

**Please note:** The Department may request specialist input/studies in respect of the above.

## 15 GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

<b>Natural veld in good condition = 50%</b>	<b>Natural veld with scattered aliens =40%</b>	Natural veld with heavy alien infestation % =	Veld dominated by alien species % =	<b>Landscaped (vegetation) % = 5%</b>
Sport field % =	<b>Cultivated land % =15</b>	Paved surface (hard landscaping) % =	<b>Building or other structure =30%</b>	Bare soil %=

**Please note:** The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site

	<b>NO</b>
--	-----------

If YES, specify and explain:

--

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.

	<b>NO</b>
--	-----------

If YES, specify and explain:

--

Are there any special or sensitive habitats or other natural features present on the site?

	<b>NO</b>
--	-----------

If YES, specify and explain:

--

Was a specialist consulted to assist with completing this section

	<b>NO</b>
--	-----------

If yes complete specialist details

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone:

E-mail:

Cell:

Fax:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

--

If YES, is such a report(s) attached?

YES	NO
-----	----

If YES list the specialist reports attached below

--

Signature  
specialist:

of \_\_\_\_\_

Date:

--

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated.

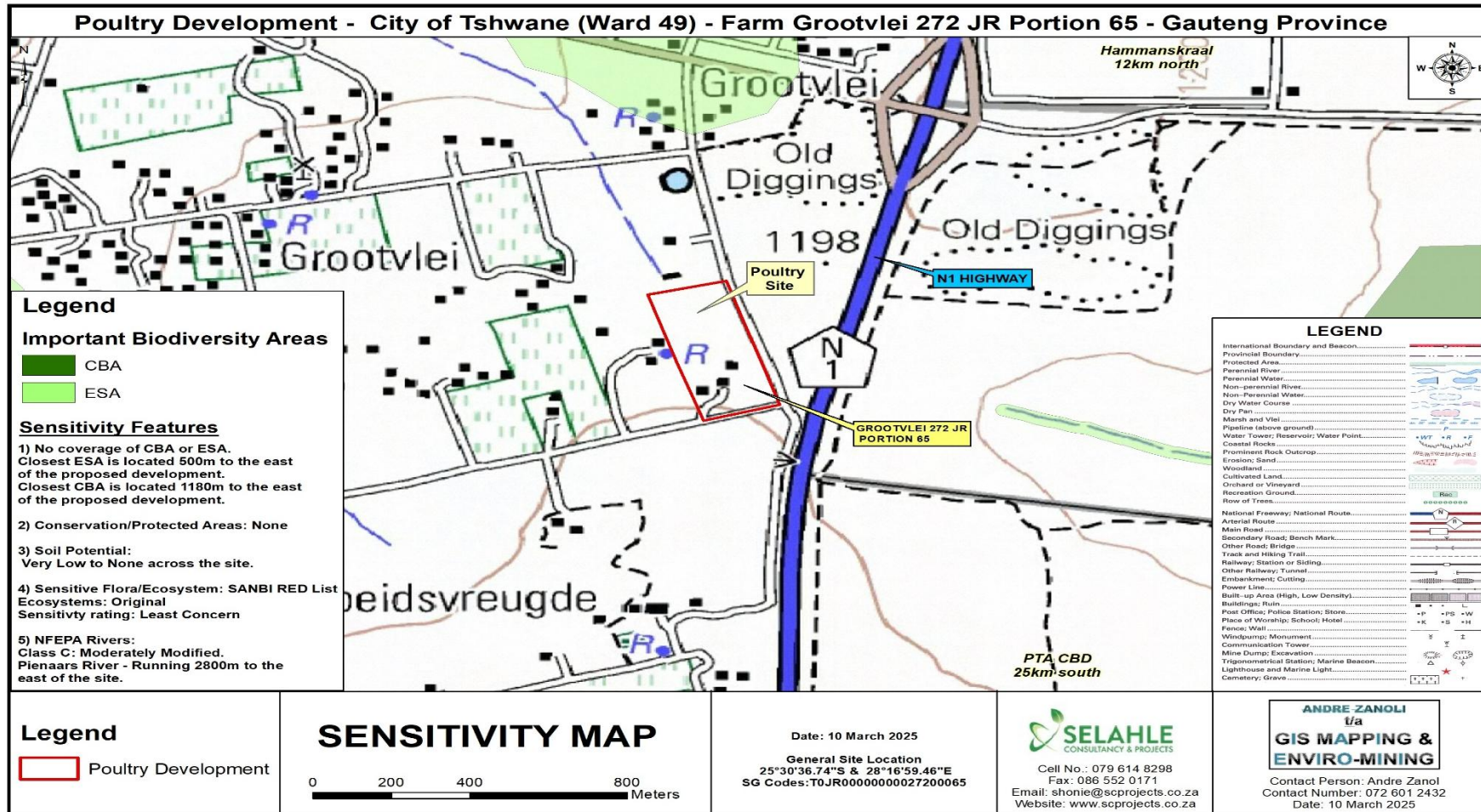


Figure 3: The Sensitivity Map of the Proposed Expansion Chicken Facility

## 16 LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

<b>1. Vacant land</b>	<b>2. River, stream, wetland</b>	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	<b>7. Agriculture</b>	<b>8. Low density residential</b>	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial <sup>AN</sup>	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport <sup>N</sup>	23. Train station or shunting yard <sup>N</sup>	<b>24. Railway line<sup>N</sup></b>	<b>25. Major road (4 lanes or more)<sup>N</sup></b>
26. Sewage treatment plant <sup>A</sup>	27. Landfill or waste treatment site <sup>A</sup>	<b>28. Historical building</b>	29. Graveyard	<b>30. Archeological site</b>
31. Open cast mine	32. Underground mine	33. Spoil heap or slimes dam <sup>A</sup>	<b>34. Small Holdings</b>	35. Fire Station
Other land uses (describe):				

NORTH					
	7	2, 7, 28	2, 30	7, 34	24
	7	2, 34	13, 35	7, 34	24
WEST	7	8	34	34	25
	8	2	34	34	24
	2, 7	2	34	34	24
SOUTH					

= Site

**Note:** More than one (1) Land-use may be indicated in a block

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an “A” and with an “N” respectively.

Have specialist reports been attached

YES

If yes indicate the type of reports below

- Waste Management Plan
- Biosecurity Plan
- Archaeological and Cultural Heritage Study

## 17 SOCIO-ECONOMIC CONTEXT

The City of Tshwane Metropolitan Municipality (also known as Tshwane) is located in the northern part of Gauteng Province. It is one of three metropolitan municipalities in the province. The City of Tshwane is the largest metropolitan municipality in size when compared to the City of Johannesburg and the City of Ekurhuleni in Gauteng province. The city also borders three other provinces, namely, Limpopo, Mpumalanga and Northwest.

Tshwane is the fourth biggest municipality of the 8 Metro's in South Africa and easily accessible via National and Regional infrastructure including the N1, N14, N2, and R21, Wonderboom Airport, OR Tambo and Lanseria International Airports. It has two traditional councils, and it is the only municipality in Gauteng with traditional leadership.

The City's population has risen from 2 478 557 in 2007 to 3 555 741 in 2017, i.e., at 92% annually, which is double the growth rate of the population of South Africa as a whole and of the province. The biggest share of the population is concentrated in regions 1 (Ga-Rankuwa, Soshanguve, Mabopane, Rosslyn) at 27%, followed by region 6 (Eersterust, Lethabong, Mamelodi, Silverlakes, Garsfontein) and Region 3 (Pretoria CBD, Hercules, Danville, Atteridgeville, Laudium, Saulsville, Lotus) at 22% and 18%, respectively.

The city is also aligning its climate change response with international peers, having signed the Compact of Mayors' Declaration in 2014 (now known as the Covenant of Mayors for Climate and Energy) and becoming a member of the C40 Cities Climate Leadership Group (C40), an international group of megacities committed to addressing climate change.

The C40 organisation supports cities and their mayors to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change. As a signatory of the Compact of Mayors' Declaration and a member of C40, the city is afforded an opportunity to be recognised as a leader in local climate change. The City of Tshwane's main economic drivers are community services, finance, trade, manufacturing and transport. The City's catalytic projects include: the Rosslyn Growth Node (Automotive Industry); Mabopane / Hammanskraal Rail Link Upgrade; Upgrade Tshwane Inner-rail loop; the Mamelodi Urban Integration of Peripheral Townships and Atteridgeville; Tshwane Inclusionary Housing and Urban Integration of Peripheral townships, Inner

City (Capital Core); Rosslyn/Wonderboom quadrant; Waltloo/Silverton land development programmes; the Moloto Rail Corridor; and Ga Rankuwa Smart City Development.

In addition, the Gauteng government will be unlocking more than R60 billion in investment in key areas over the next decade. These include, amongst others, the Automotive SEZ, Rosslyn Auto City, Menlyn Maine development High-Tech SEZ, infrastructure investment to revitalise townships and create economic opportunities and the Expansion of the Innovation Hub, contributes towards the vision of building an innovation ecosystem in Gauteng.

## 18 CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

*38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-*

*(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*

*(b) the construction of a bridge or similar structure exceeding 50m in length;*

*(c) any development or other activity which will change the character of a site-*

*(i) exceeding 5 000 m2 in extent; or*

*(ii) involving three or more existing erven or subdivisions thereof; or*

*(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*

*(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*

*(d) the re-zoning of a site exceeding 10 000 m2 in extent; or*

*(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.*

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

YES	NO
-----	----

If YES, explain:

A borehole constructed in January 1965 was observed on site. As the structure is now 60 years old, it qualifies as a heritage resource in terms of Section 34 of the National Heritage Resources Act (Act No. 25 of 1999). As such, any proposed alteration or removal of this structure may require authorisation from the relevant heritage authority.

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

The proposed development site has revealed the presence of a water-related structure that is over 60 years old. In accordance with the National Heritage Resources Act (Act No. 25 of 1999), any structure older than 60 years is automatically protected by virtue of its age. Although this particular structure holds heritage value, it is not considered to be of such significance as to prevent the proposed development from proceeding.

Based on the heritage specialist's assessment, the structure is classified as having medium to low local heritage significance and is rated as a General Protected Structure (Category B: Locally Important). The structure contributes to the broader historical narrative of the area but is not considered significant enough to prohibit the proposed development from proceeding.

The current development proposal is not expected to directly impact the identified structure. However, it is strongly recommended that the structure be avoided and not altered in any way. Any future modifications, relocation, or removal must follow the necessary heritage permitting process through PHRAG.

Although, no archaeological and or palaeontological objects observed during the survey, the applicant is reminded that these often happen underground, as such should any archaeological material be unearthed accidentally during construction (e.g., excavation), SAHRA should be alerted immediately, and construction activities should cease within a radius of at least 10m of such indicator.

Will any building or structure older than 60 years be affected in any way?  NO  
 Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?  NO  
 If yes, please attached the comments from SAHRA in the appropriate Appendix

Was a specialist consulted to assist with completing this section  YES

If yes complete specialist details

Name of the specialist:	Munyadziwa Magoma		
Qualification(s) of the specialist:	Master's degree in Archaeology and Anthropology		
Postal address:	PO BOX 7068, Midrand		
Postal code:	1685		
Telephone:	011 312 2878	Cell:	082 535 6855
E-mail:	<a href="mailto:munyadziwa@vhubvo.co.za">munyadziwa@vhubvo.co.za</a>	Fax:	086 566 8079

Are any further specialist studies recommended by the specialist?  YES  NO

If YES, specify:

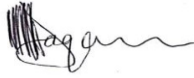
If YES, is such a report(s) attached?  YES  X

If YES list the specialist reports attached below

Heritage Impact Assessment Study

Signature  
specialist:

of



Date: 26/05/2025

## 19 SECTION C : PUBLIC PARTICIPATION (SECTION 41)

### 20 THE ENVIRONMENTAL ASSESSMENT PRACTITIONER MUST CONDUCT PUBLIC PARTICIPATION PROCESS IN ACCORDANCE WITH THE REQUIREMENT OF THE EIA REGULATIONS, 2014.

## 21 LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?

Yes	<input type="checkbox"/>
X	<input checked="" type="checkbox"/>

This Draft BA Report is currently out for a 30-day review period, and no comments from the local authority have been received to date.

If yes, has any comments been received from the local authority?

<input checked="" type="checkbox"/>	NO
<input type="checkbox"/>	X

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

No comments were received from the local Authority as yet.

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

The DBAR will be made available for public review and comment. The public will be notified via emails about the availability of the DBAR and where it can be accessed. The Registered stakeholders will be informed about the submission of the Draft Basic Assessment Report to the authority, and later about the decision given

## 22 CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least thirty (30) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES	<input type="checkbox"/>
X	<input checked="" type="checkbox"/>

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

We received an email and comment from the stakeholder who resides near the proposed development.

The comment is as follow:

- Fly Management to be taken care of.

If "NO" briefly explain why no comments have been received

The BAR report will be distributed to relevant stakeholders for comments. Any comments received will be attended to and submitted to the competent authority.

## 23 GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers' associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

The Public Participation Process was undertaken as part of the Basic Assessment Process for the proposed expansion. The process was undertaken to ensure compliance with the requirements in terms of the EIA Regulations, 2014 (as amended), published under the National Environmental Management Act (Act No. 107 of 1998, as amended).

The Public Participation Process (PPP) was undertaken to ensure compliance with Regulation 19(1)(a) of the EIA Regulations, 2014 (as amended). The PPP was conducted between **06**

**February 2025 – 07 March 2025**, and documents that were submitted to the Organs of State, Stakeholders, and Interested & Affected Parties were:

- Background Information Documents that were accompanied by the comment sheet were distributed to all Interested and Affected Parties, Organs of State, and other Stakeholders between **06 February 2025 – 07 March 2025**.
- A mandatory advertisement, to announce the intention to conduct a Basic Assessment process, was published in the Pretoria North Rekord newspaper on **07 February 2025**.
- Site notices were erected on **06 February 2025**.
- Interested and Affected Parties and other key stakeholders were directly informed of the proposed development by e-mail on **25 February 2025**.

## 24 APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice

Appendix 2 – Written notices issued as required in terms of the regulations

Appendix 3 – Proof of newspaper advertisements

Appendix 4 – Communications to and from interested and affected parties

Appendix 5 – Minutes of any public and/or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA Report

Appendix 9 – Copy of the register of I&APs

The public participation documents, including communications from I&APs, minutes of meetings where applicable, CRR, and issues raised will be addressed and included in the draft and the final BAR.

## SECTION D: RESOURCE USE AND PROCESS DETAILS

**Note:** Section D is to be completed for the proposal and alternative(s) (if necessary)

### Instructions for completion of Section D for alternatives

- 1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
- 4) Each alternative needs to be clearly indicated in the box below
- 5) Attach the above documents in a chronological order

Section D has been duplicated for  
alternatives

0

times

(complete only when appropriate)

Section D Alternative  
No.

0

(complete only when appropriate for  
above)

## 1 WASTE, EFFLUENT, AND EMISSION MANAGEMENT

### Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES

If yes, what estimated quantity will be produced per month?

1 m<sup>3</sup>

How will the construction solid waste be disposed of (describe)?

The solid construction waste (such as sand, gravel, concrete and waste material) that cannot be used for filling, landscaping and rehabilitation and other litter and waste generated during the construction phase will be removed from site and be disposed of safely and responsibly at a registered landfill site. All hazardous waste is to be disposed of at the approved hazardous waste facility.

Where will the construction solid waste be disposed of (describe)?

To a registered landfill site within the City of Tshwane Municipality

Will the activity produce solid waste during its operational phase?

YES

If yes, what estimated quantity will be produced per month?

1.5m<sup>3</sup>

How will the solid waste be disposed of (describe)?

The waste will be integrated into the municipal waste and collection services will be provided to development once every week.

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?

NO

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

No official confirmation has been received yet. This may be sorted later but prior to construction.

**Note:** If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

NO

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

- Separation of waste during the construction phase: The ECO will monitor the separation of waste during the construction phase:
  - Cement bags will be placed in a separate container and will be taken to a registered landfill site. Waste slips will be kept on site for inspection purposes.
  - Plastic material will be removed from waste stockpiles and placed in separate containers. Recycling bins will be placed at the eating area to encourage workers to separate waste and contribute to recycling. Toolbox tools will be used to educate workers and explain the concept of recycling to them.

**Liquid effluent (other than domestic sewage)**

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

	NO
--	----

If yes, what estimated quantity will be produced per month?

	m <sup>3</sup>
--	----------------

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?

	NO
--	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
--	----

If yes, what estimated quantity will be produced per month?

	m <sup>3</sup>
--	----------------

If yes describe the nature of the effluent and how it will be disposed.

N/A
-----

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?

	NO
--	----

If yes, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

--

**Liquid effluent (domestic sewage)**

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?

	NO
--	----

If yes, what estimated quantity will be produced per month?

	m <sup>3</sup>
--	----------------

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?

	NO
--	----

Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
--	----

If yes describe how it will be treated and disposed of.

--

**Emissions into the atmosphere**

Will the activity release emissions into the atmosphere?

	NO
--	----

If yes, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

**Construction Phase:**

Emissions during construction will mostly be in the form of dust and smoke.

- Emissions released by construction vehicles – the volume of emissions released is minimal and will not negatively impact the emission concentration within the area. The impact will be for a short period of time, and the impact will be insignificant.
- Dust – dust will be mitigated through dust suppression methods. A water truck will be on site and the site will be damped regularly. The impact will be of a low significance and will only be present during the construction phase.
- Fires – no open fires will be allowed on site during the construction phase. The burning of construction waste is not permissible and will be monitored by the ECO and the Health and Safety Officer.

**Operational Phase:**

There are different waste products that will be produced during the operation of the farms. This will be in the form of chicken droppings, feathers and carcasses. The domestic waste generated will be cleaned and collected by the local staff working on the farm. The waste produced will be transported to a permitted dumping site that is near the farm. In most cases, the chicken droppings will be collected and stockpiled into manure and later packed in sacks and sold to the nearby farmers to collect and used as manure. Other farmers who specialised in vegetable farming will collect/purchase the chicken droppings for compost.

Collection of uncontaminated mortalities from each facility will be done on a daily basis by the farmer and will be placed in special lockable containers and recycled by selling to other farmers/ buyers who collect for other feed production (recycling). If not sold before the close of day, this will be transported for disposal/burying at a designated and licensed waste disposal site. In terms of current practices at most landfill sites, mortalities are often buried, having been firstly covered in lime for faster decomposition.

Domestic or office waste generated will be at a small scale or quantities and will be integrated into the current waste management practice on the farm. Being mostly rural areas, most of the degradable waste is usually recycled into compost making. The non-degradable wastes and waste not recycled for any reason will be placed in waste bins provided on the site, and later transported to a permit landfill site.

## 2 WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal	Directly from water board	Groundwater <b>X</b>	river, stream, dam or lake	other	the activity will not use water
-----------	---------------------------	-------------------------	----------------------------	-------	---------------------------------

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

200000 liters
---------------

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs?

YES

If yes, list the permits required

Water Use License

If yes, have you applied for the water use permit(s)?

NO

If yes, have you received approval(s)? (attached in appropriate appendix)

YES

NO

### 3 POWER SUPPLY

Please indicate the source of power supply e.g., Municipality / Eskom / Renewable energy source

Renewable Energy and Municipality

If power supply is not available, where will power be sourced from?

### 4 ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

Electricity supply is already on the farm, and no special design measures are required for the proposed development. However, to keep electricity usage to a minimum power consumption, energy-efficient lamps will be used on the farms.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

The farmer is intending to add solar lamps as backup when needed, especially in instances of power outage. Furthermore, to use solar panel for energy consumption and use gas geysers opposed to electrical geysers.

## SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i)).

### 1 ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

The Draft Basic Assessment Report (DBAR), which will be distributed to all Interested and Affected Parties (I&APs) to raise their issues, comments and concerns. All concerns will be recorded and addressed in the draft Basic Assessment Report (DBAR).

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included) (A full response must be provided in the Comments and Response Report that must be attached to this report):

The comments received would be included and addressed in the Comment and Response Report (CRR).

## 2 IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

<b>NATURE</b>		
Include a brief description of the impact of environmental parameter being assessed in the context of the project. This criterion includes a brief written statement of the environmental aspect being impacted upon by a particular action or activity.		
<b>GEOGRAPHICAL EXTENT</b>		
This is defined as the area over which the impact will be expressed. Typically, the severity and significance of an impact have different scales and as such bracketing ranges are often required. This is often useful during the detailed assessment of a project in terms of further defining the determined.		
1	Site	The impact will only affect the site
2	Local/district	Will affect the local area or district
3	Province/region	Will affect the entire province or region
4	International and National	Will affect the entire country
<b>PROBABILITY</b>		
This describes the chance of occurrence of an impact		
1	Unlikely	The chance of the impact occurring is extremely low (Less than a 25% chance of occurrence).
2	Possible	The impact may occur (Between a 25% to 50% chance of occurrence).
3	Probable	The impact will likely occur (Between a 50% to 75% chance of occurrence).
4	Definite	Impact will certainly occur (Greater than a 75% chance of occurrence).
<b>REVERSIBILITY</b>		
This describes the degree to which an impact on an environmental parameter can be successfully reversed upon completion of the proposed activity.		
1	Completely reversible	The impact is reversible with implementation of minor mitigation measures
2	Partly reversible	The impact is partly reversible but more intense mitigation measures are required.
3	Barely reversible	The impact is unlikely to be reversed even with intense mitigation measures.
4	Irreversible	The impact is irreversible and no mitigation measures exist.

<b>IRREPLACEABLE LOSS OF RESOURCES</b>		
This describes the degree to which resources will be irreplaceably lost as a result of a proposed activity.		
1	No loss of resource.	The impact will not result in the loss of any resources.
2	Marginal loss of resource	The impact will result in marginal loss of resources.
3	Significant loss of resources	The impact will result in significant loss of resources.
4	Complete loss of resources	The impact is result in a complete loss of all resources.
<b>DURATION</b>		
This describes the duration of the impacts on the environmental parameter. Duration indicates the lifetime of the impact as a result of the proposed activity		
1	Short term	The impact and its effects will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase (0 – 1 years), or the impact and its effects will last for the period of a relatively short construction period and a limited recovery time after construction, thereafter it will be entirely negated (0 – 2 years).
2	Medium term	The impact and its effects will continue or last for some time after the construction phase but will be mitigated by direct human action or by natural processes thereafter (2 – 10 years).
3	Long term	The impact and its effects will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter (10 – 50 years).
4	Permanent	The only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or such a time span that the impact can be considered transient (Indefinite).
<b>CUMULATIVE EFFECT</b>		
This describes the cumulative effect of the impacts on the environmental parameter. A cumulative effect/impact is an effect which in itself may not be significant but may become significant if added to other existing or potential impacts emanating from other similar or diverse activities as a result of the project activity in question.		
1	Negligible Cumulative Impact	The impact would result in negligible to no cumulative effects
2	Low Cumulative Impact	The impact would result in insignificant cumulative effects
3	Medium Cumulative impact	The impact would result in minor cumulative effects
4	High Cumulative Impact	The impact would result in significant cumulative effects
<b>INTENSITY/ MAGNITUDE</b>		
Describes the severity of an impact		
1	Low	Impact affects the quality, use and integrity of the system/component in a way that is barely perceptible.

2	Medium	Impact alters the quality, use and integrity of the system/component but system/ component still continues to function in a moderately modified way and maintains general integrity (some impact on integrity).
3	High	Impact affects the continued viability of the system/ component and the quality, use, integrity and functionality of the system or component is severely impaired and may temporarily cease. High costs of rehabilitation and remediation.
4	Very high	Impact affects the continued viability of the system/component and the quality, use, integrity and functionality of the system or component permanently ceases and is irreversibly impaired (system collapse). Rehabilitation and remediation often impossible. If possible rehabilitation and remediation often unfeasible due to extremely high costs of rehabilitation and remediation.

**SIGNIFICANCE**

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. This describes the significance of the impact on the environmental parameter. The calculation of the significance of an impact uses the following formula:

$$(Extent + probability + reversibility + irreplaceability + duration + cumulative effect) \times \text{magnitude/intensity.}$$


The summation of the different criteria will produce a non-weighted value. By multiplying this value with the magnitude/intensity, the resultant value acquires a weighted characteristic which can be measured and assigned a significance rating.

Points	Impact Significance Rating	Description
6 to 28	Negative Low impact	The anticipated impact will have negligible negative effects and will require little to no mitigation.
6 to 28	Positive Low impact	The anticipated impact will have minor positive effects.
29 to 50	Negative Medium impact	The anticipated impact will have moderate negative effects and will require moderate mitigation measures.
29 to 50	Positive Medium impact	The anticipated impact will have moderate positive effects.
51 to 73	Negative High impact	The anticipated impact will have significant effects and will require significant mitigation measures to achieve an acceptable level of impact.
51 to 73	Positive High impact	The anticipated impact will have significant positive effects.
74 to 96	Negative very high impact	The anticipated impact will have highly significant effects and are unlikely to be able to be mitigated adequately. These impacts could be considered "fatal flaws".
74 to 96	Positive Very high impact	The anticipated impact will have highly significant positive effects.

**ENVIRONMENTAL RATING SIGNIFICANCE KEY:**

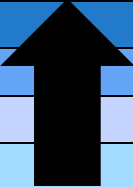
**NEGATIVE IMPACTS**

SIGNIFICANCE	RATING	FINAL RATING SCORE / VALUE RANGE
<b>Very Significant</b>	<b>Very High</b>	<b>74 – 96</b>
<b>Significant</b>	<b>High</b>	<b>51 – 73</b>
<b>Increasing Significance</b>	<b>Medium</b>	<b>29 – 50</b>
<b>Insignificant</b>	<b>Low</b>	<b>6 – 28</b>



**POSITIVE IMPACTS**

SIGNIFICANCE	RATING	FINAL RATING SCORE / VALUE RANGE
<b>Very Significant</b>	<b>Very High</b>	<b>74 – 96</b>
<b>Significant</b>	<b>High</b>	<b>51 – 73</b>
<b>Increasing Significance</b>	<b>Medium</b>	<b>29 – 50</b>
<b>Insignificant</b>	<b>Low</b>	<b>6 – 28</b>



Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Table 2: Proposal - Construction phase

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
<b>Dust</b>	Positive Low	<ul style="list-style-type: none"> <li>▪ The liberation of dust into the surrounding environment shall be effectively controlled using, inter alia, water spraying and/or other dust-allaying agents, such as dust nets.</li> <li>▪ Machinery or equipment used on the site must not constitute a pollution hazard in respect of air pollution via excessive exhaust fumes. This shall be inspected regularly by the contractor and rectified immediately.</li> <li>▪ No open fires will be allowed to be made on site.</li> <li>▪ Implement a programme of stakeholder communication that includes community engagement</li> <li>▪ before and during work on site.</li> <li>▪ Provide a complaint register on site where complaints can</li> </ul>	Negative Low	Increase in dust irritation to nearby residents and developments. Air pollution and reduced visibility for other road users.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<p>be made. This register should enable effective communication of complaints details of steps taken to resolve complaints.</p> <ul style="list-style-type: none"> <li>▪ Clearly display the contact details of the environmental site office and manager at the site entrance.</li> <li>▪ Construction activities should be limited to 07:00 to 17:00 daily.</li> <li>▪ Ensure an adequate water supply on the site for effective dust particulate matter suppression.</li> <li>▪ Always impose and regulate a speed limit of 30 km/h on the site.</li> <li>▪ Ensure that all vehicles are switched off when stationary- no vehicles should be idling for extended period.</li> <li>▪ Avoid the use of diesel- or petrol-powered generators and use mains electricity or</li> </ul>		

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		battery powered equipment where practicable.		
<b>Traffic</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ Place adequate advance warnings (Turning Trucks) along the site access road.</li> <li>▪ Manage the increase in construction traffic in terms of congestion, road surface damage, safety concerns, dust and erosion.</li> <li>▪ Only designated roads should be used for construction vehicles; and</li> <li>▪ Ensure drivers and operators of equipment are familiar with the safety policies and regulations.</li> </ul>	Positive Low	The construction phase is likely to generate additional traffic in terms of construction vehicles and heavy vehicles delivering materials to the site.
<b>Stormwater run-off</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ Permeable paving should be used to reduce runoff and increase infiltration and ground water recharge.</li> <li>▪ As much as possible water should be retained on site to be reused again for irrigation and habitat creation.</li> </ul>	Positive Low	Contaminated water would runoff the site and eventually into the nearby watercourse.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>▪ Natural storm water must flow freely, either as sheet flow or where necessary in open grass swales, to allow for infiltration and retention. Natural veld grass must be left undisturbed as far as possible, to allow natural drainage.</li> <li>▪ Where feasible the use of vegetated swales should be used to accommodate surface runoff, in order to increase infiltration into the soil.</li> <li>▪ Effective stormwater management should be a priority during the construction phase. This should be monitored as part of the EMPr.</li> </ul>		
<b>Soil Erosion, loss of topsoil, loss of soil quality, soil pollution, soil contamination</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ Construction activities should preferably take place during the dry months. All surface run-offs shall be managed in</li> </ul>	Positive Low	Further degradation of the soil, increase in soil erosion and contamination.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<p>such a way so as to ensure erosion of soil does not occur.</p> <ul style="list-style-type: none"> <li>▪ All surfaces that are susceptible to erosion shall be covered with a suitable vegetative cover as soon as construction is completed.</li> <li>▪ No vehicles are allowed to move across any wet areas (e.g. drainage line), other than those specifically designated as access, which could cause erosion scouring and compaction.</li> <li>▪ Straw bales should be placed and adequately secured on all downhill locations where erosion may occur to prevent washouts and to retain siltation and topsoil from the site.</li> <li>▪ The area being cleared of vegetation for the construction activities must be limited to a minimum. Only</li> </ul>		

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<p>the footprint of the structure may be cleared.</p> <ul style="list-style-type: none"> <li>▪ Drip trays must be used under all standing heavy machinery.</li> <li>▪ Absorbents and clean-up materials and kits should be standard equipment present on the construction site.</li> <li>▪ Proper spill and leaks management guidelines and procedures should be part of the standard procedures of the construction team.</li> <li>▪ The contractor to procure a spill kit and use it during the construction phase of the project.</li> <li>▪ Fuel must be stored in a secure area in a steel tank supplied and maintained by the fuel suppliers. Leakage of fuel must be avoided.</li> <li>▪ An adequate bund wall, 110% of volume, must be provided for fuel and diesel areas to</li> </ul>		

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		accommodate any spillage or overflow from these substances. The area inside the bund wall must be lined with an impervious lining to prevent infiltration of the fuel into the soil. Firefighting equipment must be present at this site.		
<b>Fauna and Flora</b> Site clearing, loss of vegetation and degradation of the ecosystem	Negative High	<ul style="list-style-type: none"> <li>▪ Snaring and hunting of fauna by construction workers on or adjacent to the site are strictly prohibited and the Local Municipality shall prosecute offenders. It should also be a condition of employment that any employees/ workers caught poaching will be dismissed.</li> <li>▪ Workers must be trained on how to deal with fauna species as intentional killing will not be tolerated.</li> <li>▪ Before any vegetation is removed, suitably qualified person (i.e. on ECO request</li> </ul>	Positive Low	Snaring and hunting of present fauna on site would be practised by untrained employees and this will impact the existing ecosystems. Further degradation of the area. Erosion and increase of the proliferation of invasive species.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<p>or a vegetation specialist) shall inspect the study area for any plant/ grass/ tree species that could be transplanted to other similar/ suitable areas. This includes all Red Data or Protected, or rare plants that may be found during the flora site assessment or during construction operations.</p> <ul style="list-style-type: none"> <li>▪ All invader or exotic plant species must be removed from the site and disposed of at a landfill site.</li> <li>▪ Removal of natural vegetation should only be limited to the footprint of the development.</li> <li>▪ Do not clear the vegetation outside of the footprint area.</li> <li>▪ Should any animals (e.g. reptiles or mammals) be found during the construction phase, the ECO or relevant specialist should be contacted immediately to</li> </ul>		

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		ensure the safe removal of the specimen.		
<b>Loss of ecological function</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ No littering by construction workers is permitted. Any litter will be collected and removed off-site to a registered waste site.</li> <li>▪ Stockpiles of vegetation are only to be located in areas approved by the ECO and may not exceed 2m in height.</li> <li>▪ Methods of stacking must take cognisance of the possible creation of a fire hazard.</li> <li>▪ No burning of stockpiled vegetation is permitted.</li> <li>▪ None of these species may be introduced and they must all be controlled.</li> <li>▪ The alien plants on site will be removed during construction.</li> <li>▪ Care must be taken to avoid the introduction of alien plant species to the site and surrounding areas. (Particular</li> </ul>	Positive Low	Re-introduction of alien invasive species.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		attention must be paid to imported material).		
<b>Alien invasive plant species proliferation</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ The alien plants on site will be removed during construction.</li> <li>▪ Care must be taken to avoid the introduction of alien plant species to the site and surrounding areas. (Particular attention must be paid to imported material).</li> <li>▪ Alien vegetation re-growth must be controlled throughout the entire site during the construction period.</li> <li>▪ Areas which have been disturbed will be quickly colonised by invasive alien species. An ongoing management plan must be implemented for the clearing/eradication of alien species.</li> </ul>	Negative Low	Proliferation of the alien invasive plant species. Further degradation of the natural habitat.
<b>Hydrology</b>	Positive Low	<ul style="list-style-type: none"> <li>▪ Cover any wastes that are likely to wash away or contaminate stormwater</li> </ul>	Negative Low	Groundwater contamination might occur through seepage of hazardous materials into the soil through stormwater runoff.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>▪ Ensure handling, transport and disposal of hazardous substances are adequately controlled and managed.</li> <li>▪ Provide containment areas for potential pollutants at construction camps, refuelling depot and concrete batching plants.</li> <li>▪ Cement mixing shall be done only at specifically selected sites. After construction activities ended, the cement shall be crushed and removed from the site. This mixing area shall then be ripped and rehabilitated.</li> </ul>		
<b>Groundwater Pollution (improper siting, poor design, faulty construction, and incorrect operation and maintenance)</b>	<b>Negative High</b>	<ul style="list-style-type: none"> <li>▪ Septic systems should be located a safe distance from drinking water sources to avoid potential contamination.</li> <li>▪ Areas with high water tables and shallow impermeable layers should be avoided due to insufficient unsaturated soil</li> </ul>	<b>Positive Low</b>	Groundwater contamination might occur through seepage of hazardous materials into the soil through stormwater runoff.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<p>thickness to ensure sufficient treatment.</p> <ul style="list-style-type: none"> <li>Soil permeability must be adequate to ensure proper treatment of septic system effluent.</li> </ul>		
<b>Noise Pollution</b>	Negative Low	<ul style="list-style-type: none"> <li>All plant and construction equipment to be kept in good repair to ensure that point source noise emissions are reduced.</li> <li>Work outside the regular working hours (weekdays 8am – 5pm) must be approved, and adjacent property owners must be notified.</li> <li>Strive for compliance with the relevant South African National Standards (e.g. SANS 10103) and other noise control legislation such as the Occupational Health and Safety Act (Act No. 85 of 1993).</li> </ul>	Positive Low	During the construction phase, there will be an increase in the ambient noise level on-site and on surrounding properties.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
Land pollution, degradation	Negative Medium	<ul style="list-style-type: none"> <li>▪ Rubble and general construction waste on site should be removed at regular intervals.</li> <li>▪ All waste must be separated according to type and stored in separate drums, adequately marked according to waste sort.</li> <li>▪ The Contractor shall prevent littering and the random discard of solid waste on the site.</li> <li>▪ Provision of adequate numbers of litter bins throughout the development; and Implementation of an appropriate collection and disposal strategy to ensure regular removal of waste to a permitted waste disposal facility.</li> <li>▪ Hazardous waste not to be mixed with general waste and be disposed of at permitted site.</li> </ul>	Positive Low	<p>Land Pollution due to the improper handling of waste during the construction phase.</p> <p>The remaining concrete mixture can degrade the environment if not properly managed. Cement and liquid concrete are hazardous to the natural environment on account of the high pH of the mixed material, and the chemicals contained therein.</p>

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>▪ Records of all waste being taken off site must be recorded and kept as evidence.</li> <li>▪ Concrete must only be mixed on mortarboards (where small quantities of onsite mixing are required) or other impermeable surfaces, and not directly on the ground.</li> <li>▪ The visible remains of concrete, either solid or from washings, shall be physically removed immediately and disposed of as waste, (washing of visible signs into the ground is not acceptable).</li> <li>▪ All excess aggregate shall also be removed and suitably disposed of.</li> </ul>		
<b>Traffic during construction</b>	Negative Medium	<ul style="list-style-type: none"> <li>▪ A road safety programme should be implemented in order to inform all relevant parties of the possible risks of the construction site.</li> </ul>	Positive Low	Should the mitigation not be implemented, the increased traffic would cause a drastic traffic impact to the local employees around the proposed study area, causing a hindrance of traffic flow during peak hours.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>Develop an information campaign regarding the hazards associated with increased heavy vehicle traffic, and precautionary measures to be taken by the Construction Company.</li> <li>Heavy trucks should be directed to deliver all construction material after peak hours each day (i.e. 09:00- 15:00)</li> </ul>		
<b>Employment Creation</b>	Positive High	<ul style="list-style-type: none"> <li>The proposed development will create more employment opportunities during the construction phase.</li> </ul>	Positive High	Status Quo
<b>Crime, Safety and Security</b>	Positive Low	<ul style="list-style-type: none"> <li>No construction activities are to be allowed after hours during weekdays or over weekends.</li> <li>Only a limited number of two-night watchmen are to be allowed on the property to ensure the safety of equipment stored on site overnight.</li> </ul>	Negative Low	There would be an increase in the probability of crime in the area, especially at the site.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
<b>Visual Impacts</b>	Negative Medium	<ul style="list-style-type: none"> <li>Keep the construction sites and camps neat, clean and organised to portray a tidy appearance.</li> <li>Remove rubble and other construction rubbish off-site as soon as possible or place it in containers to keep the construction site free from additional unsightly elements.</li> </ul>	Negative Low	Rubble would be left continually on site.
<b>Crop Farming (Loss of Arable Land, Dust Deposition on Crops, Chemical Contamination)</b>	Negative Very High	<ul style="list-style-type: none"> <li>Demarcate and maintain a safe buffer distance between construction activities and crop fields.</li> <li>Regularly water exposed surfaces, install dust nets or barriers near crop areas, and avoid construction during high winds.</li> <li>Store chemicals in bunded areas away from farmland and implement a spill prevention and response plan.</li> </ul>	Negative Medium	<ul style="list-style-type: none"> <li>Construction vehicles may encroach on adjacent cultivated land, leading to temporary or permanent loss of productive farmland.</li> <li>Construction dust can settle on leaves, interfering with photosynthesis and potentially reducing crop yield.</li> </ul>

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>Limit access roads and machinery movement near crop fields.</li> <li>Protect existing irrigation infrastructure from accidental damage.</li> </ul>		
<b>Grazing (Loss of Grazing Land, Disturbance and Stress to Livestock, Blocking of Grazing Routes)</b>	<b>Positive Medium</b>	<ul style="list-style-type: none"> <li>Erect temporary fencing to prevent livestock from entering construction activity site.</li> <li>Avoid peak grazing periods where possible; provide temporary alternative routes or access to grazing areas.</li> <li>Restore disturbed grazing land using indigenous grass species suitable for livestock feeding.</li> </ul>	<b>Negative Low</b>	<ul style="list-style-type: none"> <li>Noise, vibrations, and increased human activity can stress animals, affecting their health and behaviour.</li> <li>Construction dust can settle on leaves, interfering with photosynthesis and potentially reducing crop yield.</li> <li>Construction demarcation, materials, or machinery may block livestock pathways.</li> </ul>

**Table 3: Operational Phase**

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
<b>Proposal Technology</b>	<b>Positive High</b>	<ul style="list-style-type: none"> <li>Making use of energy saving techniques i.e., energy saving light bulbs, installation of dual (gas/electrical) stoves,</li> </ul>	<b>Very High (Positive)</b>	The occupiers of the proposed development would suffer from the loadshedding which is currently deemed as a National State of disaster.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		showers, water heat pump instead of individual geysers per unit. The solar panels would be installed on the roof of the car parking as well as the roof of the units to be developed. Insulation of hot water pipes and hot water storage tanks (if any); and Insulation of windows, walls, ceilings and roofs of permanent structures.		
<b>Traffic</b>	Positive Medium	<ul style="list-style-type: none"> <li>All vehicular traffic on site should adhere to standard road safety measures.</li> </ul>	Negative Medium	Traffic will be increased during peak times.
<b>Visual Impact</b>	Negative High	<ul style="list-style-type: none"> <li>Structures that are to be erected should be aesthetically pleasing and blend into the area as far as possible to minimise the visual impact.</li> <li>Buildings must always be maintained in good standing.</li> <li>Remove litter and maintain facilities and landscaped areas to a high standard.</li> </ul>	Positive Medium	When there is no expansion of the chicken layer facility, it would not be aesthetically pleasing for surrounding residents.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
<b>Stormwater flow and drainage</b>	Positive Low	<ul style="list-style-type: none"> <li>All structures and infrastructure must be designed in such a manner that surface water runoff is limited and no concentrated flows are created.</li> </ul>	Negative Low	Contaminated water would runoff the site and eventually into the nearby watercourse.
<b>Surface &amp; Groundwater Pollution (improper siting, poor design, faulty construction, and incorrect operation and maintenance)</b>	Negative Medium	<ul style="list-style-type: none"> <li>Septic systems should be located a safe distance from drinking water sources to avoid potential contamination.</li> <li>Areas with high water tables and shallow impermeable layers should be avoided because there is insufficient unsaturated soil thickness to ensure sufficient treatment.</li> <li>Soil permeability must be adequate to ensure proper treatment of septic system effluent.</li> </ul>	Negative Low	Waste and contaminated water can be washed into the stream/watercourse. groundwater contamination might occur through seepage of hazardous materials into the soil through stormwater runoff.
<b>Odour and pest management</b>	Positive High	<ul style="list-style-type: none"> <li>Implement and adhere to the Biosecurity measures outlined in the Biosecurity plan that forms part of the Basic Assessment Report.</li> </ul>	Positive Low	Spread of diseases and odour nuisance to neighbouring farms and surrounding lodges and businesses.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>Implement and adhere to the waste management measures outlined in the waste management plan that forms part of the Basic Assessment Report.</li> </ul>		
<b>Waste management</b>	Negative Medium	<ul style="list-style-type: none"> <li>The waste bins shall be cleared by municipal services on a weekly basis.</li> <li>During municipal strikes special arrangements must be made to have the waste removed via private waste removal services.</li> <li>Several waste bins must be provided and clearly marked, or colour coded according to industry standards to allow for recycling of waste into separate bins.</li> </ul>	Positive Low	Waste on site and burning of waste if there is no plan when there are municipality strikes or no waste collection. If there is no separation at source, there will be more waste going to landfills.
<b>Disease transmission between the other animals.</b>	Negative High	<ul style="list-style-type: none"> <li>Enforce strict biosecurity protocols</li> <li>Separate housing, feeding, and handling areas</li> <li>Routine veterinary checks</li> </ul>	Positive Low	If the mitigation measures are not implemented, the poultry farm may experience disease outbreaks due to cross-species transmission from the other animals, leading to high mortality.

Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
		<ul style="list-style-type: none"> <li>Restrict the other animals access to poultry areas</li> </ul>		
<b>Stress and behavioural disruption to poultry caused by noise or presence of other animals</b>	Negative Medium	<ul style="list-style-type: none"> <li>Install physical barriers or fencing</li> <li>House dogs away from poultry</li> <li>Designate separate activity zones (Distance between the animals housing)</li> </ul>	Negative Low	Stress caused by uncontrolled animals can reduce poultry productivity and affect egg or meat quality.
<b>Risk of poultry injury or predation by other animals or accidental trampling by larger animals</b>	Negative Medium	<ul style="list-style-type: none"> <li>Prohibit unsupervised animal movement</li> <li>House the other animals in secure enclosures</li> <li>Install perimeter fencing around the poultry area</li> </ul>	Negative Low	Poor management of all the animals on site may lead to irreversible impacts

specialist reports that were used to fill in the above tables. Such reports are to be attached as an Appendix.

- Waste Management plan
- Biosecurity Plan
- Archaeological and Cultural Heritage Study

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

From an environmental point of view, the activity is considered viable, and no fatal flaw exists. It is recommended that all mitigation measures be implemented to reduce the anticipated impacts.

### 3 IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

The decommissioning phase is not foreseen as this is not an operational activity. The only decommissioning will be that of the construction site and associated infrastructure.

## 4 CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

During construction phase, improper storm water management could lead to contamination of stormwater, the impacts of which could be felt even in other surrounding areas other than the farm which is the point of impact. This could lead to temporal disturbance in ecological systems in surrounding areas and the contamination of the stream nearby. This therefore requires to be tackled properly at the point of impact.

The general handling of waste during operational stage, if not properly planned, could together with the chicken droppings result in significant pollution source. This could be either air pollutions as a result of bad odours or pollution of surface water, which could further lead to contamination of underground water. This therefore requires that each specific impact needs to be dealt with, in order to minimise the chances of any potential cumulative impacts.

The nuisance or odours arising from the proposed operation could lead to airborne diseases and odours which can affect areas where wind direction is headed. Furthermore, in terms of the biosecurity the presence of multiple poultry operations in close proximity increases the risk of disease transmission, including avian influenza, and bacterial infections. Disease outbreaks in one facility can quickly spread to others due to shared air currents, water sources, pest movement (flies, rodents), or human traffic (workers, suppliers). Without strict biosecurity protocols and sufficient buffer distances, this clustering of poultry operations creates a high-risk zone for recurrent outbreaks, threatening the health and economic viability of all farms in the area.

The disposal of poultry related waste to the landfill sites can lead to significant cumulative impacts over time, Firstly, poultry waste is rich in organic material and nitrogen, which decomposes rapidly and contributes to high methane emissions, a potent greenhouse gas. As more waste is disposed to the landfill, the climate impact accumulates. Secondly, the waste increases the volume and biological load at landfill sites, contributing to leachate generation a pollutant liquid that, if not properly contained, can contaminate groundwater and surface water resources. Over time, this increases the risk of environmental degradation in areas surrounding the landfill, especially if waste management systems are overburdened.

A positive cumulative impact will be that, as the development is up and running, the community will have more viable economic activity. Also, this will help to increase the cumulative impacts of the entire Tshwane Poultry value chain in the form of creating value added chain, with its associated social and economic benefits

## 5 ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment

after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

## **Proposal**

### **Biophysical environment**

The proposed development will result in the clearing of vegetation on the portion of the farm intended for the proposed development. The clearing of vegetation is likely to result in the exposing the land and possible surface runoff pollution. This can be mitigated by implementing appropriate stormwater management strategies, including proper channelling of the stormwater during construction and operational phases by installing proper infrastructure for stormwater management.

Other impacts that were identified, for the construction phase are noted to be mitigatable. Noise and dust, and oil spillage can be mitigated by avoiding and managing the occurrences. Impacts during the construction stage may be short term and may end when construction is completed. Operational stage impacts on the natural environment can also be mitigated if proper strategies are put in place. The possibility of mitigating these impacts makes reduces their significant levels considerably, to low significance.

The neglect of mitigation measures, such as waste management could result in severe health hazards. This therefore infers the need to take the recommendations made herein and in all applicable regulations and guidelines seriously.

Socio economic impacts during the construction stage will include employment opportunities, for both labours and suppliers of construction materials. The spiral effect of these will contribute to the improvement of economic activities during this period.

During operational stage, more people are likely to be employed on permanent basis. This may reduce the unemployment in the area further, and also bring improvement in livelihoods of the local community. The outputs from the farm, will also continue to service the local market, and going a long way in stimulating economic activities within the area. Local distributors of chicken products will continue to be in business, and the local consumers will have sustained supply. Communicatively, the contribution of the production on this farm to Rooiwal poultry Value Chain, which will serve as a larger wheel that will stimulate the local economy of the region, with positive spill over benefits.

From this assessment, it is observed that most of the negative impacts can be readily mitigated. Also, the positive impacts from the proposed development far outweigh the identified negatives (if properly mitigated). A no-go alternative may therefore be unwarranted, given the absence of fatal flaws with the proposed development on this farm.

### **Alternative 1**

### **Alternative 2**

### **No-go (compulsory)**

From this assessment, it is observed that most of the negative impacts can be readily mitigated. Also, the positive impacts of the proposed development far outweigh the identified negatives (if properly mitigated). The no-go alternative meaning the proposed development does not proceed it would have both environmental and socio-economic implications that must be carefully evaluated.

From an environmental perspective, the no-go option would result in the preservation of the current ecological state of the site. Natural habitats, biodiversity, and ecosystems would remain undisturbed, thereby avoiding potential negative impacts such as habitat fragmentation, vegetation clearance, soil erosion, and disturbance to fauna. Additionally, there would be no risk of pollution to air, water, or soil that could arise from construction and operational activities. Overall, the no-go option would ensure the continuation of natural processes and ecological stability in the area.

However, the socio-economic impacts of the no-go option would largely be negative. The development would likely provide job opportunities during both the construction and operational phases, which would contribute to alleviating local unemployment and stimulating economic activity. These employment opportunities would be lost if the development does not proceed. Additionally, the local economy would miss out on potential investments, procurement, infrastructure improvements. Communities that could benefit from improved services, livelihood opportunities, or enhanced infrastructure would remain underserved, potentially leading to continued socio-economic stagnation.

In conclusion, while the no-go alternative offers clear environmental benefits by maintaining the current natural state of the site, it also implies a missed opportunity for socio-economic upliftment in the surrounding community. Given that the environmental impacts of the proposed development can be effectively mitigated, and the benefits outweigh the negatives, the no-go option appears less desirable in this context.farm.

## **6 IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE**

**Table 4**

<b>Impact</b>	<b>Before mitigation</b>	<b>After mitigation</b>
<b>Proposal/ Preferred Alternative</b>	High (Positive)	Very high (Positive)
<b>Traffic</b>	Medium	Medium
<b>Visual Impact</b>	High	Low
<b>Stormwater runoff</b>	Medium	Low
<b>Waste management</b>	High	Low
<b>Biosecurity</b>	High	Low
<b>Heritage impacts</b>	High	Low
<b>Odour</b>	High	Low
<b>Pest</b>	High	Low

For alternative:

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

After assessing the environmental impacts in terms of both biophysical and socio-economic aspects, the proposed alternative was identified as the preferred option, as it poses the least impact on the environment and is socio-economically justifiable. Additionally, the proposed alternative site is considered more feasible due to its social acceptability and economic viability. Potential impacts on the ecological environment will be mitigated through the implementation of the Environmental Management Programme (EMP) during the construction phase.

## 7 SPATIAL DEVELOPMENT TOOLS

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

### **Spatial Development Framework (SDF)**

The Spatial Development Framework (SDF) thus seeks to address issues in Pretoria's spatial and social landscape:

- Increasing pressure on the natural environment and green infrastructure.
- Urban sprawl and fragmentation.
- Spatial inequalities and the job-housing mismatch.
- Exclusion and disconnection emanating from:
  - high potential underused areas (the mining belt and the Modderfontein area);
  - securitisation and gated developments, and disconnected street networks (high cul-de-sac ratios and low intersection densities).
- Inefficient residential densities and land use diversity.
- In terms of the Gauteng EMF, the site is Environmental Management Zoned 1, which is an urban development zone.
- The primary intention of GPEMF Zone 1 is to streamline urban development activities in it and to promote development infill, densification and concentration of urban development within the urban development zones.

It can be concluded that the proposed site is suitable for the proposed development as the proposed development complies with the development policy for the area.

### **National Development Plan (NDP)**

The National Development Plan (NDP) 2030 provides a policy framework that looks beyond current constraints confronting the nation to the transformation imperatives that are needed to support accelerated economic growth over the next 20 to 30 years, focussing specifically on addressing poverty and reducing inequality.

A number of key spatial principles are outlined in Chapter 8 of the NDP, 'Sustainable Human Settlements'. They include: spatial justice, spatial resilience, spatial sustainability, spatial efficiency and spatial quality. Of specific relevance to the SDF Review process are the NDP's human settlement targets, as set out in Chapter 8, which focus on transforming human settlements and the national space economy. These spatial targets include:

- Upgrade all informal settlements on suitable, well-located land by 2030.
- More people living closer to their places of work.
- Better quality public transport.
- More jobs in proximity to townships.

To achieve these targets the NDP advocates strong measures to prevent further development of housing in marginal locations (far from urban amenities including jobs and access to infrastructure, hard and soft), increased urban densities to support sustainable public transport, incentivising economic activity in and adjacent to townships; and engaging the private sector in the low income and gap housing markets. This development is in line with the targets of the NDP.

### **Gauteng Provincial Environmental Management Framework (GPEMF)**

The Gauteng Provincial Environmental Management Framework (GPEMF) is a legal instrument in terms of the Environmental Management Framework Regulations, 2010. The regulations are designed to assist environmental impact management, including EIA processes, spatial planning and sustainable development.

The objectives of the policy are:

- To ensure efficient urban development (including associated service infrastructure) in defined selected areas with lower environmental concerns and high development demand to help facilitate the implementation of Gauteng Growth and Management Perspective, 2014.
- To facilitate the optimal use of current industrial, mining land and other suitable derelict land for the development of non-polluting industrial and large commercial developments.
- To protect Critical Biodiversity Areas (CBAs) within urban and rural environments.
- To ensure the proper integration of Ecological Support Areas (ESAs) into rural land use change and development.
- To use ESAs as defined in municipal bioregional plans in spatial planning of urban open space corridors and links within urban areas.
- To focus on the sustainability of development through the implementation of initiatives such as:
  - Energy efficiency programmes, plans and designs
  - Waste minimisation, reuse and recycling
  - Green infrastructure in urban areas
  - Sustainable Urban Drainage Systems (SUDS).

## **8 RECOMMENDATION OF THE PRACTITIONER**

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).

YES	
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If “NO”, indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

None.

If “YES”, please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

The EAP recommend the following specific conditions to be included as part of the positive Decision to be issued.

- The implementation of the mitigation measures contained in the EMPr to achieve maximum advantage from beneficial impacts, and sufficient mitigation of adverse impacts;
- All the guidelines and mitigations as supplied in the relevant specialist report must be taken into consideration and forms extension of the EMPr and conditions of the Environmental Authorisation.
- All declared weeds and invaders must be removed from the site on an ongoing basis and in phases.
- The areas to be protected must be fenced/ protected in an acceptable manner (as approved by the ECO) prior to the construction phase.
- An environmental awareness training programme for all staff members must be put in place by the Contractor. Before commencing with any work, all staff members must be appropriately briefed about the EMPr and relevant occupational health and safety issues.
- An ECO must be commissioned to implement the EMPr during the construction phase.
- Where possible, skilled and unskilled labour should be sourced from the local community.
- Construction activities must be kept to usual working hours.
- The parking must be monitored and maintained throughout its operational life.
- If any heritage items are unearthed, construction work must cease, and SAHRA and PRHA-G must be contacted.

## **9 THE NEEDS AND DESIREBILITY OF THE PROPOSED DEVELOPMENT (AS PER NOTICE 792 OF 2012, OR THE UPDATED VERSION OF THIS GUIDELINE)**

In terms of the Needs and Desirability as per GN 792 of 2012 the following is applicable:

### **NEED ('timing'):**

**Question 1: Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved spatial development framework (SDF) agreed to by the relevant environmental authority? (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP).**

Yes: the area is zoned for agricultural services and fits into the integrated development plan in many ways. The 2016/2017 IDP prioritizes Local Economic Development as part of its developmental agenda. This is to be driven through the promotion of tourism and agricultural activities in the region. This development is aligned with this vision, through the plans of the Department of Rural Development and Land Reform.

**Question 2: Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occurs here at this point in time?**

The area is envisioned for agricultural purposes, hence any expansion in the development of the area will be commensurate with the proposed land use.

**Question 3: Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate).**

The proposed development touches on various priorities, extending from the National Development Plan, the provincial mid-term development strategy and the Integrated development plan of the Municipality. Development of agriculture, and local economy as a way of empowering rural communities is a common priority for the area, as well as the department. The benefits to be derived from the proposed development, will expend foremost to the communities around the project area, and also contribute to achieving the broader regional agenda.

**Question 4: Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?**

The proposed area is serviced with basic services such as water and electricity and were adjudged to be adequate for the proposed development. However, they have one borehole that they use.

**Question 5: Is this development provided for in the infrastructure planning of the municipality, and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?**

The City of Tshwane Municipality, which provides infrastructure and services to the area, is one of the custodians of the proposed development and are also on board with the planning and implementation of the development. Thus, this development is provided for in the infrastructure planning of the municipality.

**Question 6: Is this project part of a national programme to address an issue of national concern or importance?**

Yes, the proposed development addresses primarily the national challenge of food security, unemployment. This is aligned to the National Development Plan visions. Increased productivity, in the farm will increase employment which will in term improve household income and support livelihood.

## **10 THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED (*CONSIDER WHEN THE ACITIVTY IS EXPECTED TO BE CONCLUDED*)**

The Environmental Authorisation will be required for a period of 10 years, to ensure that all construction activities are completed.

**11 ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)  
(MUST INCLUDE POST CONSTRUCTION MONITORING  
REQUIREMENTS AND WHEN THESE WILL BE  
CONCLUDED.)**

If the EAP answers “Yes” to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached

YES

## SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMPr

Appendix I: Other information

## CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed.