Draft Basic Assessment Report

for

# MOSIANE BOERDERY (PTY) LTD

Prepared by:

Bucandi Environmental Solutions



Project Manager:

Dr. Hélen Prinsloo (D.Tech) (*Pr.Sci.Nat.*) Reg. No. 400108/11 (SACNASP) EAPASA 2022/5586

June 2023

# Table of contents

Sectio	n A: Activity information	6
1.	Project description	6
2.	Feasible and reasonable alternatives	7
a)	) Site alternatives	7
b)	) Lay-out alternatives	8
c)	Technology alternatives	9
d)	Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)	. 9
e)	No-go alternative	9
3.	Physical size of the activity	9
4.	Site access	10
5.	Locality map	10
6.	Layout/route plan	11
7.	Sensitivity map	11
8.	Site photographs	11
9.	Facility illustration	11
10.	Activity motivation	12
11.	Applicable legislation, policies and/or guidelines	18
12.	Waste, effluent, emission and noise management	19
a)	Solid waste management	19
b)	) Liquid effluent	21
c)	Emissions into the atmosphere	23
d)	) Waste permit	23
e)	Generation of noise	23
13.	Water use	24
14.	Energy efficiency	25
Sectio	n B: Site/Area/Propterty description	26
1.	Gradient of the site	27
2.	Location in landscape	27
3.	Groundwater, soil and geological stability of the site	27
4.	Groundcover	28
5.	Surface water	28
6.	Land use character of surrounding area	29
7.	Cultural/Historical features	30
8.	Socio-economic character	30
a)	) Local Municipality	30
b)	Socio-economic value of the activity	32
9.	Biodiversity	32
Sectio	n C: Public participation	35
1.	Advertisement and notice	35
2.	Determination of appropriate measures	35
3.	Issues raised by interested and affected parties	35
4.	Comments and response report	35
5.	Authority participation	36
6.	Consultation with other stakeholders	36

Section D: Impact Assessment	37
1. Impacts that may result from the planning and design, construction, operational,	
decommissioning and closure phases as well as proposed management of identified	
impacts and proposed mitigation measures	37
2. Environmental impact statement	45
Section E: Recommendation of practitioner	49
Section F: Appendices	50



department of economic, small business development, tourism and environmental affairs FREE STATE PROVINCE

(For official use only)

File Reference Number: Application Number: Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

#### Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. This report format is current as of **13 February 2020**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. 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.
- 4. Where applicable tick the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. 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 rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent and **EAPASA registered** environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

# SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? YES NO If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

# 1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Mosiane Boerdery is proposing the construction of a red meat abattoir with capacity to slaughter 1 200 red meat units per week (200 per day) and a sheep feedlot with capacity for 10 000 sheep on the farm Harmonie 1438, situated in Warden District within Phumelela Local Municipality area. The need for a Basic Assessment is triggered by Listing 1; activities 3 and 4 in GN R983 dated 4 December 2014 and amended on 07 April 2017. The total footprint of the proposed project is 82 474.88 m<sup>2</sup> (8.24 ha) including the abattoir (1 500 m<sup>2</sup>) and the sheep feedlot (80 974.88 m<sup>2</sup>). The house that is present on the property will be upgraded into an abattoir building. The site for the feedlot currently contains some camps providing overnight housing for sheep (capacity for 200 at a time) with the remainder of the feedlot site consisting of indigenous vegetation that has been impacted on by heavy grazing. The majority of the site is classified as "Other" in terms of biodiversity classification, meaning that it contains indigenous vegetation, but does not contain important biodiversity features, nor does it support important ecosystems. The proposed activity will consist of the following:

• Upgrading of the existing farm house and outbuildings to house a red meat abattoir.

• Earthworks and clearing of vegetation on the site for construction of infrastructure (camps, hallways, road and parking lot).

- The construction of a sheep feedlot with capacity to house 10 000 sheep.
- All camps will have feeding and water troughs.

The site will be enclosed with a fence that uses steel poles as posts and steel cable. These cables will be secured using I-bolts and steel clamps. One entrance gate will be constructed to give access to the site.

# b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327,325 and 324	Description of project activity
ACTIVITY NO. 3: The development and related operation of facilities or infrastructure for the slaughter of animals with a product throughput of (ii) reptiles, game and red meat exceeding 6 units per day.	The proposed abattoir will have capacity to slaughter 200 units of red meat per day.
ACTIVITY NO. 4: The development and related operation of facilities or infrastructure for the concentration of animals in densities that exceed (ii) a) more than 1 000 units per facility.	The proposed project includes a sheep feedlot with capacity for 10 000 sheep.
ACTIVITY NO. 27: The clearance of an area of 1 hectare or more, but less than 20 hectares of	The feedlot will necessitate the clearance of 8.09 ha of indigenous vegetation.

6

indigenous vegetation.

# 2. FEASIBLE AND REASONABLE ALTERNATIVES

*"alternatives"*, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h) of GN 326, Regulation 2014 as amended. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether 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. 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

#### a) Site alternatives

Alternative 1 (preferred alternative)			
Description	Lat (DDMMSS)	Long (DDMMSS)	
The house that is present on the property will be upgraded into	27°04'04.5"	26° 43' 07.0"	
an abattoir building. The site for the feedlot currently contains			
some camps providing overnight housing for sheep (capacity for			
200 at a time) with the remainder of the feedlot site consisting of			
indigenous vegetation that has been impacted on by heavy			
grazing. The majority of the site is classified as "Other" in terms			
of biodiversity classification, meaning that it contains indigenous			
vegetation, but does not contain important biodiversity features,			
nor does it support important ecosystems. A small area is			
classified as Ecological Support Area (ESA) 2, however this part			

has been completely transformed as it contains the existing farmhouse and outbuildings. An ESKOM point and borehole is present at the existing farm house. The N3 runs within 2.5 km from the site and a public road connecting to the N3 runs within 1.5 km of the site. An existing farm road provides access to the site.		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

Alternative: Alternative S1 (preferred)	Latitude (S):	Longitude (E):
Starting point of the activity		
Middle/Additional point of the activity		
End point of the activity		
Alternative S2 (if any)		
Starting point of the activity		
Middle/Additional point of the activity		
End point of the activity		
Alternative S3 (if any)		
<ul> <li>Starting point of the activity</li> </ul>		
Minipality / Analytic and the start of the start with the		

- Middle/Additional point of the activity
- End point of the activity

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

# b) Lay-out alternatives

Alternative 1 (preferred alternative)			
Description	Lat (DDMMSS)	Long (DDMMSS)	
The total footprint of the proposed project is 82 474.88 m <sup>2</sup> (8.24	27°46'13.91"S	28°55'51.74"E	
ha) including the abattoir (1 500 m <sup>2</sup> ) and the sheep feedlot (80			
974.88 m <sup>2</sup> ).			
Alternative 2			
Description	Lat (DDMMSS)	Long (DDMMSS)	

Alterna	ative 3	
Description	Lat (DDMMSS)	Long (DDMMSS)

#### c) Technology alternatives

# Alternative 1 (preferred alternative)

Different alternatives were considered for disposal of waste generated at the abattoir and the feedlot. Manure will be removed at the end of each cycle and will not be stockpiled on the farm, but at a different site. It will be processed on a different property and then be used as fertiliser on agricultural fields. Mortalities will be collected by a predator farm (agreement will be included in the FBAR). Blood, skin and DOA's will be collected by a contractor on a daily basis (agreement will be included in the FBAR).

# Alternative 2 Alternative 3

#### d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
Alternative 2		
Alternative 3		

#### e) No-go alternative

Paragraphs 3 – 13 below should be completed for each alternative.

#### 3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

#### Alternative:

Alternative A1<sup>1</sup> (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

Size	of	the	activi	ty:

82 474.88 m <sup>2</sup>
m²
m²

or, for linear activities:

<sup>&</sup>lt;sup>1</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

# Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

Lengui oi t	ine activity.
	m
	m
	m

Size of the site/servitude:

2 913 094.44 m<sup>2</sup>

m<sup>2</sup>

m<sup>2</sup>

Longth of the activity

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

# Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

# 4. SITE ACCESS

Does ready access to the site exist? If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

The N3 runs within 2.5 km from the site and a public road connecting to the N3 runs within 1.5 km of the site. An existing farm road provides access to the site.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

# 5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (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 map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town (s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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 degrees and decimal

YES $\checkmark$	NO
	m

minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

# 6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

# 7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100-year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

# 8. 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 Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

# 9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C 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.

# **10. ACTIVITY MOTIVATION**

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES √	NO	Please explain
The property is currently zoned as agricultural allowing for agri-industrial proposed development.	infrastr	ucture s	such as the
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES √	NO	Please explain
The planning of the activity took into account the actions stipulated in the environmental impacts and conserving natural resources	PSDF	such as	minimising
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
The development will not compromise the urban edge of the edge of bui	lt enviro	nment	
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	$_{\rm VES}^{\rm YES}$	NO	Please explain
Approval of this application will not compromise the integrity of the existing IDP and SDF			
(d) Approved Structure Plan of the Municipality	YES √	NO	Please explain
Approval of this application will not compromise the integrity of the existi	ng IDP a	and SD	F.
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g., Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES √	NO	Please explain
The proposed site contains areas classified as "Other" and areas classified as "ESA 2") in terms of Biodiversity Planning Units. The area classified as ESA 2 has been completely transformed by the construction of the existing farm house and outbuildings.			
(f) Any other Plans (e.g., Guide Plan)	YES	NO √	Please explain

3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved 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 √	NO	Please explain
Building plans will be assessed and signed off by the Municipality	1		
4. 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.)	$YES_{}$	NO	Please explain
Internationally production of sheep has increased significantly over the past few years in line with increased consumer demands for production of sheep and expectations are that consumer demand will continue to increase. Due to overcrowding of present facilities, lack of additional facilities and therefore the potential for increased biological risk, suppliers have embarked on a process of establishing new facilities in order to overcome these problems and ensure the long-term sustainability and viability of the industry. The socio-economic value of the project will indirectly have a positive impact on the immediate area as well as cater for the increasing demand for sheep products in Free State and nationally. At least 10 temporary employment opportunities will be created during the development and construction phase. At least 10-15 people will be permanently employed during the operational phase of the activity. Contractors are employed during the construction phase			
5. 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? (Confirmation by the relevant Municipality in this regard must be attached to the Draft Basic Assessment Report as Appendix I.)	YES √	NO	Please explain
Electricity supply already exist at the site.			
6. 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)? (Comment by the relevant Municipality in this regard must be attached to the Draft Basic Assessment Report as Appendix I.)	YES √	NO	Please explain
The intended development is of agri-industrial nature and is therefore within the planning for the area			
<ul> <li>7. Is this project part of a national programme to address an issue of national concern or importance?</li> </ul>	YES	N√O	Please explain

8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES √	NO	Please explain
An existing building will be used for the abattoir. Part of the site already that will be incorporated into the sheep feedlot.	contains	camps	for sheep
9. Is the development the best practicable environmental option for this land/site?	YES √	NO	Please explain
A portion of the site has been transformed by the existing farm house, o sheep. It is a good option for the land to be used, instead of deserting the clearing land elsewhere.	utbuilding e existing	js and g infras	camps for structure and
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES √	NO	Please explain
increased consumer demands for production of sheep and expectations are that consumer demand will continue to increase. Due to overcrowding of present facilities, lack of additional facilities and therefore the potential for increased biological risk, suppliers have embarked on a process of establishing new facilities in order to overcome these problems and ensure the long-term sustainability and viability of the industry. The socio-economic value of the project will indirectly have a positive impact on the immediate area as well as cater for the increasing demand for sheep products in Free State and nationally. At least 10 temporary employment opportunities will be created during the development and construction phase. At least 10-15 people will be permanently employed during the operational phase of the activity. Contractors are employed during the construction phase and additional employment opportunities are therefore created.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO √	Please explain
	VES	NO	
12. Will any person's rights be negatively affected by the proposed activity/ies?	TL3	√	Please explain
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO √	Please explain
	T		
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO √	Please explain

15. What will the benefits be to society in general and to the local communities?	Please explain	
Internationally production of sheep has increased significantly over the past few years in line with increased consumer demands for production of sheep and expectations are that consumer demand will continue to increase. Due to overcrowding of present facilities, lack of additional facilities and therefore the potential for increased biological risk, suppliers have embarked on a process of establishing new facilities in order to overcome these problems and ensure the long-term sustainability and viability of the industry. The socio-economic value of the project will indirectly have a positive impact on the immediate area as well as cater for the increasing demand for sheep products in Free State and nationally. At least 20 temporary employment opportunities will be created during the development and construction phase. At least 10-15 people will be permanently employed		
during the operational phase of the activity. Contractors are employed during the con and additional employment opportunities are therefore created.	nstruction phase	
16. Any other need and desirability considerations related to the proposed activity?	Please explain	
17. How does the project fit into the National Development Plan for 2030?	Please explain	
Economy and employment Economic infrastructure		
Inclusive rural economy		
18. Please describe how the general objectives of Integrated Environmental M set out in section 23 of NEMA have been taken into account.	lanagement as	
During the Basic Assessment process all positive and negative impacts were thoroughly assessed and described. Mitigation measures have been proposed where applicable and written into the EMPr for the activity. The activity will only go ahead in adherence with the EMPr.		
19. Please describe how the principles of environmental management as set of NEMA have been taken into account.	out in section 2	
The proposed development will be socially, environmentally and economically sustainable. It will provide employment opportunities and sought after meat products. It will be designed to minimise the impacts on the environment by minimising waste and placing the development on a suitable site.		
No-go alternative: Using the land for grazing of sheep and overnight sheep can	ips.	
1. Is the activity permitted in terms of the property's existing $VES_{100000000000000000000000000000000000$	Please explain	
The property is currently zoned as agricultural allowing for agri-industrial infrastructure the proposed development.	re such as	

2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES √	NO	Please explain
The site is currently being used for sheep grazing and will continue to be	e used a	s such.	
(b) Urban edge / Edge of Built environment for the area	$\mathbf{YES}_{}$	NO	Please explain
The development will not compromise the urban edge of the edge of bui	lt enviro	nment.	
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES √	NO	Please explain
Approval of this application will not compromise the integrity of the existi	ing IDP a	and SDF	
(d) Approved Structure Plan of the Municipality	YES $$	NO	Please explain
The site will continue to be used for grazing.			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g., Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)		NO √	Please explain
The proposed site contains areas classified as "Other" and areas classified as "ESA 2") in terms of Biodiversity Planning Units. The area classified as ESA 2 has been completely transformed by the construction of the existing farm house and outbuildings.			
(f) Any other Plans (e.g., Guide Plan)	YES	NO √	Please explain
	-		
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved 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			Please explain
Existing land use will continue.			
4. 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.)	YES	NO √	Please explain
Using the site as grazing will benefit only the land owner and the existing	g labour	force w	ll be utilised.

5. 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? YES (Confirmation by the relevant Municipality in this regard must be attached to the Draft Basic Assessment Report as Appendix I.)	Please explain		
No municipal services will be required for the intended activity.			
<ul> <li>6. 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)? (Comment by the relevant Municipality in this regard must be attached to the Draft Basic Assessment Report as Appendix I.)</li> </ul>	Please explain		
The intended development is of agri-industrial nature and is therefore within the planning f area that is zoned agricultural.	for the		
7. Is this project part of a national programme to address an issue of national concern or importance?YESNO $$	Please explain		
The site will be used as grazing for sheep.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.) VES $\sqrt{1000}$	Please explain		
The site is located in a farming area.			
9. Is the development the best practicable environmental option $\begin{array}{ c c c } YES & NO \\ \hline \\  \end{array}$	Please explain		
It will necessitate the need for the abattoir to be constructed elsewhere where a new building needs to be constructed.			
10. Will the benefits of the proposed land use/development $\begin{array}{c c} YES & NO \\ v \end{array}$ outweigh the negative impacts of it?	Please explain		
The site will only be used as grazing.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?YESNO $\sqrt$	Please explain		
12. Will any person's rights be negatively affected by the roposed activity/ies?	Please explain		
13. Will the proposed activity/ies compromise the "urban edge"YESNOas defined by the local municipality? $$	Please explain		
14. Will the proposed activity/ies contribute to any of the 17YESNOStrategic Integrated Projects (SIPS)? $$	Please explain		

17

15. What will the benefits be to society in general and to the local communities?	Please explain
Using the site for grazing will benefit only the land owner and the existing labour force utilised.	e will be
16. Any other need and desirability considerations related to the proposed activity?	Please explain
None	
17. How does the project fit into the National Development Plan for 2030?	Please explain
None	
18. Please describe how the general objectives of Integrated Environmental M set out in section 23 of NEMA have been taken into account.	anagement as
None	
19. Please describe how the principles of environmental management as set of of NEMA have been taken into account.	ut in section 2
None	

# 11. 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, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act, Act No. 107 of 1998.		Free State Department of Tourism Environment and	1998
Listing 1 of regulation 327 promulgated under Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998) in Government Gazette 38282. Listed activity 3 (ii), 4 (ii)(a) and 27.	The proposed abattoir will have capacity to slaughter 200 units of red meat per day. The proposed project includes a sheep feedlot with capacity for 10 000 sheep. The feedlot will necessitate the clearance of 8.09 ha of indigenous vegetation.	Economic Affairs	1998
National Water Act, Act No. 36 of 1998.	Water use will be registered with the Department of Water Affairs	Department of Water Affairs	1998
Conservation of Agricultural	A copy of the BAR will be sent	Free State Department	1983

Resources Act, Act No. 43 of 1983	to the Free State Department of Agriculture and Rural Development	of Agriculture and Rural Development	
Heritage Act, Act No 25 of 1999.	The site will be investigated to see if any action is necessary in terms of the Heritage Act.	South African Heritage Resources Act	1999
Meat Safety Act, Act 40 of 2000 Red Meat Regulations, Reg. 153 published on 24 February 2006 in GN 8402.	Only applicable to facilities containing abattoirs.	Free State Department of Tourism Environment and Economic Affairs	2000
NationalEnvironmentalManagement:Waste Act, ActNo. 59 of 2008ListedActivitiesReg.921publishedon2013inGN37083	Activity does not trigger a Listed Activity	Free State Department of Tourism Environment and Economic Affairs	2008 2016
Occupational Health and Safety Act, Act 85 of 1993 Noise regulation, 2003 Environmental regulations for	The regulations were taken into account during the design of the activity and process in order to adhere to the Act.		1993 2003 1987
workplaces, 1987 Facility regulations,1990 General Health and Safety Regulations 1986			1990 1986
Electrical Installation Regulations 2009			2009
Electrical Machinery Regulations, 1988.			1988
Construction Regulations, 2014			2014

# 12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

YES √	NO
	15 m <sup>3</sup>

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

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

Waste is expected to be limited to packaging materials (shrink wrap, cardboard) and litter generated by the construction staff. Waste will be recycled as far as possible. Non-recyclable waste will be sorted into different types and disposed of at a suitably licensed waste disposal facility.

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

Construction phase solid waste will be disposed of at the nearest licensed waste disposal site. Waste considered unsuitable for municipal waste disposal sites will be disposed of at a suitably licensed hazardous waste disposal facility (e.g., WasteTech).

Will the activity produce solid waste during its operational phase?

YES √	NO
	100 m <sup>3</sup>

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

How will the solid waste be disposed of (describe)? Operational phase solid waste will be disposed of at the nearest licensed waste disposal site. Waste considered unsuitable for municipal waste disposal sites will be disposed of at a suitably licensed

hazardous waste disposal facility (e.g., WasteTech).

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Any general waste such as litter generated by staff will be disposed of at the nearest licensed waste disposal site.

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

#### Manure Removal

Approximately 400 tons of sheep manure will be produced monthly. Manure will be removed at the end of each cycle and will not be stockpiled on site. It will be processed on a different property and then be used as fertiliser on agricultural fields.

#### **Disposal of Mortalities**

Approximately 25 dead sheep will be produced in the feedlot per month. The carcasses are removed on a daily basis and is collected by a predator farmer. A letter showing agreement will be included in the FBAR.

#### Abattoir waste

Blood, skins and DOA's will be collected by a contractor on a daily basis (agreement will be included in the FBAR).

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, then 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 NEM: YES

NO √

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM: WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility? <u>YES</u> NO  $\sqrt{}$  If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM: WA must also be submitted with this application.

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM: WA must also be submitted with this application.

b) Liquid effluent

No-go alternative:

No solid waste will be produced.

No solid waste will be produced.

No solid waste will be produced.

phase?

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

If YES, what estimated quantity will be produced per month? Will the activity produce any effluent that will be treated and/or disposed of on site?

(describe)? No solid waste will be produced.

landfill site will be used. No solid waste will be produced.

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

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

Will the activity produce solid waste during its operational phase? If YES, what estimated quantity will be produced per month?

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

If the solid waste will be disposed of into a municipal waste stream, indicate which registered

Where will the solid waste be disposed of if it does not feed into a municipal waste stream

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, then 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 NEM: WA?

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.

## DRAFT BASIC ASSESSMENT REPORT - BEEFDOTCOM

Will the activity produce solid construction waste during the construction/initiation If YES, what estimated quantity will be produced per month?

YES NO  $\sqrt{}$ 0 m<sup>3</sup>

YES	NO √
0m <sup>3</sup>	

NO

NO √

NO √

m<sup>3</sup>

YES

YES

YES

21

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

YES 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:

Berms will be implemented for diverting rainwater around the feedlot, and storm water ditches will direct rainwater that falls within the feedlot to a scarification area. The storm water ditches and the scarification area will be planted with extra vegetation and rocks will be placed to slow down water flow. This will give rain water that fell within the feedlot a chance to filter through the vegetation before being discharged.

All surfaces, floors and walls of the abattoir will be sprayed down with water using pressure hoses on a daily basis. On a weekly basis it will be treated with a foam detergent that will be left to evaporate. All wash water will be collected through a drain system, screened and skimmed to remove blood, fat and other solids (see solid waste management above). The wash water will be directed to aerobic dams for removal of bacteria before being used for irrigation of vegetable fields (see Waste Management Plan attached).

#### No-go alternative:

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

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

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



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.

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

YES NO

If YES, provide the particulars of the facility:

<i>i i i i i i i i i i</i>		,			
Facility name:	N/A				
Contact	N/A				
person:					
Postal	N/A				
address:					
Postal code:	N/A				
Telephone:	N/A		Cell:	N/A	
E-mail:	N/A		Fax:	N/A	
			-		

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

None

#### c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions YES NO √ and dust associated with construction phase activities?

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

If YES, the applicant must 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:

Dust and methane gas will be generated by the presence of sheep in the feedlot. The applicant is located in a remote area and this should not cause any discomfort to neighbours.

The slaughtering activity will necessitate strict implementation of the Waste Management Plan in order to minimise odours.

#### No-go alternative

Will the activity release emissions into the atmosphere other that exhaust emissions YES NO and dust associated with construction phase activities?  $\sqrt{}$ If YES, is it controlled by any legislation of any sphere of government? YES NO

If YES, the applicant must 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:

None

#### d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms YES of the NEM: WA?

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

#### No-go alternative:

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM: WA?

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

#### e) Generation of noise

Will the activity generate noise?

NO YES Λ





NO √

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

YES NO

Describe the noise in terms of type and level:

Low levels of noise will be generated by the sheep present. Low levels of noise will also be generated by the machinery operating at the abattoir.

#### No-go alternative:

Will the activity generate noise?

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

Describe the noise in terms of type and level: None

#### 13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal Water board	Groundwater $\sqrt[]{}$	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:

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs

Based on the size of the property, the applicant is allowed 1 820.69 m<sup>3</sup> of water per month.

#### No-go alternative

24

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal Water board Groundwater Alver, stream, Other 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: Does the activity require a water use authorisation (general authorisation or water YES use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

$_{\rm VES}^{\rm YES}$	NO
YES	NO √



0 litres

NO √

#### **14. ENERGY EFFICIENCY**

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

#### Abattoir:

Energy efficient light bulbs will be used throughout. Load reduction motors will be installed. All machinery will be fitted with soft starters.

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

None

#### No-go alternative

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

None

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

None

# SECTION B: SITE/AREA/PROPTERTY DESCRIPTION

#### Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g., A):

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? YES NO  $\sqrt{}$  If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property	Province	Free State
description/physi	District	Thabo Mofutsanyana District Municipality.
cal address:	Municipality	
	Local Municipality	Phumelela Local Municipality.
	Ward Number(s)	7
	Farm name and	Harmonie 1438
	number	
	Portion number	None
	SG Code	F0150000000143800000
	Where a large number attach a full list to this above.	of properties are involved (e.g., linear activities), please application including the same information as indicated
Current land-use zoning as per local municipality	Agriculture	

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

YES NO √

**IDP/records:** 

# 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

#### Alternative S1:

Flat	1:50 – 1:20 √	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
Alternative S2	? (if any):					
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
Alternative S3	(if any):					
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

#### 2. LOCATION IN LANDSCAPE

#### Alternative S1:

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

2.1 Ridgeline		2.4 Closed valley	2.7 Undulating plain / low hills	
2.2 Plateau	$\checkmark$	2.5 Open valley	2.8 Dune	
2.3 Side slope of hill/mountain		2.6 Plain	2.9 Seafront	
2.10 At sea				

# 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

#### Alternative S1:

Is the site(s) located on any of the following?

Shallow water table (less than 1.5m deep) Dolomite, sinkhole or doline areas

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

Alterna	tive S1:	Alternat (if any):	tive S2	Alternat (if any):	tive S3
YES	NO √	YES	NO	YES	NO
YES	NO √	YES	NO	YES	NO
YES	NO√	YES	NO	YES	NO
YES	NO $\checkmark$	YES	NO	YES	NO
YES	NO√	YES	NO	YES	NO
YES	NO √	YES	NO	YES	NO
YES	NO √	YES	NO	YES	NO
YES	NO√	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the

27

completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

# 4. GROUNDCOVER

## Alternative S1:

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition <sup>E</sup> √	Natural veld with scattered aliens <sup>E</sup>	Natural veld with heavy alien infestation <sup>E</sup>	Veld dominated by alien species <sup>E</sup>	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure $$	Bare soil

If any of the boxes marked with an "E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

# 5. SURFACE WATER

#### Alternative S1:

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO √	UNSURE
Non-Perennial River	YES	NO $$	UNSURE
Permanent Wetland	YES	NO √	UNSURE
Seasonal Wetland	YES	NO √	UNSURE
Artificial Wetland	YES	NO √	UNSURE
Estuarine / Lagoonal wetland	YES	NO $$	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

# 6. LAND USE CHARACTER OF SURROUNDING AREA

## Alternative S1:

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station <sup>H</sup>
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential <sup>A</sup>	Church	Agriculture $$
Retail commercial & warehousing	Old age home	River, stream or wetland $$
Light industrial	Sewage treatment plant <sup>A</sup>	Nature conservation area
Medium industrial AN	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line <sup>N</sup>	Museum
Power station	Major road (4 lanes or more) <sup>N</sup>	Historical building
Office/consulting room	Airport <sup>N</sup>	Protected Area
Military or police	Harbour	Cravavard
base/station/compound	Harbour	Glaveyalu
Spoil heap or slimes dam <sup>A</sup>	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "<sup>N</sup> "are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO √
Core area of a protected area?	YES	NO√
Buffer area of a protected area?	YES	NO √
Planned expansion area of an existing protected area?	YES	NO√
Existing offset area associated with a previous Environmental Authorisation?	YES	NO √

29

Buffer area of the SKA?

YES NO √

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

# 7. CULTURAL/HISTORICAL FEATURES

#### Alternative S1:

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES	NO √
Unce	ertain

NO √

NO √

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?YESIs it necessary to apply for a permit in terms of the National Heritage ResourcesYESAct, 1999 (Act 25 of 1999)?YES

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

# 8. SOCIO-ECONOMIC CHARACTER

#### a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

25.3% (2011)

Economic profile of local municipality:

The Phumelela Local Municipality is a Category B municipality situated within the Thabo Mofutsanyana District in the Free State Province. It is the largest municipality in the district, making up a quarter of its geographical area. Vrede ('at peace') rests in the north-eastern Free State about 20 km east of the N3, close to the Mpumalanga border. Vrede is surrounded by undulating Highveld hills. It is 220 km from northern Johannesburg and about 30 km from Cornelia on the R102 to Warden and Harrismith, on the Volksrust-Newcastle Road. It is the spine of the Drakensburg off the N3 highway from Durban to Mbombela (previously Nelspruit), and the alternative Durban to Johannesburg, and also on the main

30

route from Johannesburg via Newcastle to the North Coast and Zululand. Travellers from down south their the Kruger National Park. can use it to make way to Warden is a town situated on the N3 highway between Johannesburg and Durban. The town has one of the largest Dutch Reformed Churches in South Africa, with seating for 1 750 people. Memel is a Russian word meaning 'surrounded by water' and is named after a small town in east Prussia. This pristine country village is situated in the north-eastern corner of the Free State close to the Drakensberg escarpment, 240 km from Johannesburg and 300 km from Pietermaritzburg. The village of Memel is the central hub of the local farming community but is fast becoming one of South Africa's most sought-after birding spots. Also, the well-known Amajuba Mountain is only 40 km from Memel.

Area: 8 197 km<sup>2</sup>

Cities/Towns: Memel, Vrede, Warden

Main Economic Sectors: Agriculture, tourism

	2016	2011						
Population	50 054	47 772						
Age Structure								
Population under 15	28.9%	31.7%						
Population 15 to 64	65.5%	62.3%						
Population over 65	5.6%	6.0%						
Dependency Ratio								
Per 100 (15-64)	52.7	60.5						
Sex Ratio								
Males per 100 females	97.5	94.1						
Population Growth								
Per annum	1.06%	n/a						
Labour Market								
Unemployment rate (official)	n/a	25.3%						
Youth unemployment rate (official) 15-34	n/a	34.6%						
Education (aged 20 +	)							
No schooling	7.2%	11.3%						
Matric	23.2%	19.4%						
Higher education	4.6%	6.5%						
Household Dynamics	5							
Households	14 586	12 888						
Average household size	3.4	3.6						
Female headed households	40.0%	39.3%						
Formal dwellings	69.6%	73.0%						
Housing owned	51.3%	50.2%						
Household Services								

Flush toilet connected to sewerage	64.5%	59.3%	
Weekly refuse removal	61.0%	65.1%	
Piped water inside dwelling	28.1%	30.6%	
Electricity for lighting	79.1%	74.9%	

Level of education:

No schooling: 7.2%	
Matric: 23.2%	
Higher education: 4.6%	
(2016 data)	

# b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 17 500	00.00
What is the expected yearly income that will be generated by or as a result of the	R 75 000	000.00
activity?		
Will the activity contribute to service infrastructure?	YES √	NO
Is the activity a public amenity?	YES	NO √
How many new employment opportunities will be created in the development and	20	
construction phase of the activity/ies?		
What is the expected value of the employment opportunities during the	R 250 000.00	
development and construction phase?		
What percentage of this will accrue to previously disadvantaged individuals?	90%	
How many permanent new employment opportunities will be created during the	10-15	
operational phase of the activity?		
What is the expected current value of the employment opportunities during the	R 6 500 0	00.00
first 10 years?		
What percentage of this will accrue to previously disadvantaged individuals?	90%	

# 9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

# Alternative S1:

Systematic Biodiversity Planning Category			Category	If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA) √	Other Natural Area (ONA) √	No Natural Area Remaining (NNR)	A small section is classified as ESA 2. However, this is where the existing farmhouse and outbuildings are located and the area has been completely transformed. The existing building will be upgraded for the abattoir.

# b) Indicate and describe the habitat condition on site

# Alternative S1:

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	86.5%	The majority consist of indigenous vegetation that has been impacted on by heavy grazing and has a low level of alien invasive plants. This area is classified as "Other" in terms of Biodiversity Planning Units.
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	13.5%	This area has been transformed by the existing farmhouse, and outbuildings, as well as the establishment of overnight camps for sheep (capacity for 200).

# c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems			
Ecosystem threat Critical		Wetland (including rivers,			
status as per the	status as per the Endangered		led and Estuary		

Terrestrial Ecos	Aquatic Ecosystems							
National Environmental Management:	unchanneled wetlands, flats, seeps pans, and artificial wetlands)							
Biodiversity Act (Act No. 10 of 2004)	Threatened	YES	NO √	UNSURE	YES	NO √	YES	NO √

 d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g., threatened species and special habitats)
 Alternative S1:

The house that is present on the property will be upgraded into an abattoir building. The site for the feedlot currently contains some camps providing overnight housing for sheep (capacity for 200 at a time) with the remainder of the feedlot site consisting of indigenous vegetation that has been impacted on by heavy grazing. The majority of the site is classified as "Other" in terms of biodiversity classification, meaning that it contains indigenous vegetation, but does not contain important biodiversity features, nor does it support important ecosystems.

# **SECTION C: PUBLIC PARTICIPATION**

# 1. ADVERTISEMENT AND NOTICE

Publication name	Beeld	
Date published	13 December 2022	
Site notice position	Latitude	Longitude
	27°45'12.16"	28°55'52.6"
Date placed	13 December 2022	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

# 2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 326

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 326

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or
		e-mail address)
Mr. Tinus Steenkamp	Neighbour	083 738-5218
Mr. Frans Steenkamp	Neighbour	083 443-3540
Mr. Flip Beukes	Neighbour	083 466-2210
Mr. Johan Creptow	Neighbour	082 777-3947

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

# 3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No response has been received	

# 4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Draft BAR as Appendix E3.

# 5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title,	Tel No	Fax No	e-mail	Postal address
	Name and Surname)				
DWS	(Bernard Jase) or (George Nel)	083 236 4945		jaseb@dws.gov.za nelg@dws.gov.za	
Phumelela Local Municipality (Ms. M. J. Mthembu)	Ms. M. J. Mthembu	058 913- 8313			Private Bag X5 Vrede, 9835
Thabo Mofutsanyana District Municipality	Ms. M. R. Mogopodi	058 718- 1036			Private Bag X810 Witsieshoek, 9870

Include proof that the Authorities and Organs of State received written notification of the proposed activities as Appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

# 6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as Appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

# SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended 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.

#### 1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A (2) of this report.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1	preferred alternative)		
	Direct impacts:		
	Positive impacts	High	None
	Air quality and disturbance	Low	Dust control by means of watering if necessary. Vehicles to be regularly serviced and well-tuned. Operations to be undertaken during working hours only.
	Surface and groundwater pollution	Low	Machinery must be properly maintained at all times. Servicing of machinery must take place only in specific demarcated and protected areas. Measures must be taken for the proper disposal of oils, grease, oil filters, rags, etc.
			Berms will be implemented for diverting rainwater around the feedlot, and storm water ditches will direct rainwater that falls within the feedlot to a scarification area. The storm water ditches and the scarification area will be planted with extra vegetation and rocks will be placed to slow

Activity	Impact summary	Significance	Proposed mitigation
Activity	Impact summary	Significance	Proposed mitigation down water flow. This will give rain water that fell within the feedlot a chance to filter through the vegetation before being discharged. All surfaces, floors and walls of the abattoir will be sprayed down with water using pressure hoses on a daily basis. On a weekly basis it will be treated with a foam detergent that will be left to evaporate. All wash water will be collected through a drain system, screened and skimmed to remove blood, fat and other solids (see solid waste management above). The wash water will be directed to aerobic dams for removal of bacteria before being used for irrigation of vogotable, fields
			irrigation of vegetable fields (see Waste Management Plan attached).
	Sewage and domestic waste	Low	Proper ablution facilities must be provided i.e., chemical toilets at appropriate locations on site if necessary or existing facilities must be used. Workers must be made aware of the risk of soil water contamination. Domestic waste must be disposed of in appropriate containers, and removed to the nearest municipal waste-disposal site as part of existing waste management system.
	Soil compaction, loss of fertility and increased erosion	Low	Appropriate measures must be taken to reduce the risk of erosion from unprotected slopes i.e., Diversion berms, ponding pools, and not exceeding angles of repose of stockpiled material. All unprotected slopes must be Rehabilitated concurrent with construction.
	Fires	Low	Cooking and heating fires

Activity	Impact summary	Significance	Proposed mitigation
			permitted only in designated
			areas with appropriate safety
			measures. Adequate
			available as prescribed by the
			relevant safety standards and
			legislation.
	Disturbance of fauna	Low	Only small animals occur in this
			area e.g., small rodents and
			reptiles. The area is
			surrounded by similar habitat
			and fauna is expected to move
			areas. No fauna found on the
			site will be killed
	Disturbance of flora	High	Clearance of vegetation should
		5	be kept at a minimum and
			restricted to the proposed site
			boundary.
	Removal of indigenous vegetation	High	In the event of any Protected or
			Declining species being
			recorded within the approved
			development site, permission
			for the removal of such species
			should be obtained from the
			Permitting Office of DESTEA,
			and the appropriate in situ and
			/ or ex situ conservation
			measures should be developed
			and implemented with the
			approval of the DESTEA
			conservation authorities.
			Where feasible, protected or
			Declining species can be
			translocated to degraded or
			untransformed parts of the
			study area which provide
			potentially suitable habitat, but
			such translocations will have to
			be carried out in a way that
			ensures no ecological
			degradation of the host habitat
			occurs, and will have to be
			evaluated by an ecologist for

Activity	Impact summary	Significance	Proposed mitigation
			each species and each
			potential translocation area.
			Alternatively, protected or
			Declining species can be
			rescued and donated to
			appropriate conservation and
			research institutions such as
			the Walter Sisulu National
			Botanical Garden (Roodepoort)
			or the Pretoria National
			Botanical Garden of SANBI
			Where possible, development
			should avoid habitat identified
			with high ecological sensitivity.
			According to the AIS
			regulations all declared alien
			weeds must be effectively
	Sofoty		controlled or eradicated.
	Salety	LOW	to be controlled at all times
	Aesthetics	Low	If needed, an additional line of
		-	trees will be planted to
			minimise visual impact.
	Cumulative impacts:		
	Direct impacts:		
	None		
	Indirect impacts:		
	Cumulative impacts:		
	None		

Activity	Impact summary	Significance	Proposed mitigation
Alternative S	1		
	Direct impacts:		
	Positive impacts	High	None
	Air quality and disturbance	Low	Dust control by means of watering if
			necessary. Vehicles to be regularly
			serviced and well-tuned. Operations
			to be undertaken during working

Activity	Impact summary	Significance	Proposed mitigation
			hours only.
	Surface and groundwater pollution	Low	Machinery must be properly maintained at all times. Servicing of machinery must take place only in specific demarcated and protected areas. Measures must be taken for the proper disposal of oils, grease, oil filters, rags, etc.
			Berms will be implemented for diverting rainwater around the feedlot, and storm water ditches will direct rainwater that falls within the feedlot to a scarification area. The storm water ditches and the scarification area will be planted with extra vegetation and rocks will be placed to slow down water flow. This will give rain water that fell within the feedlot a chance to filter through the vegetation before being discharged. All surfaces, floors and walls of the abattoir will be sprayed down with water using pressure hoses on a daily basis. On a weekly basis it will be treated with a foam detergent that will be left to evaporate. All wash water will be collected through a drain system, screened and skimmed to remove blood, fat and other solids (see solid waste management above). The wash water will be directed to aerobic dams for removal of bacteria before being used for irrigation of vegetable fields (see Waste Management Plan attached).
	Sewage and domestic waste	Low	Proper ablution facilities must be provided i.e., chemical toilets at

Activity	Impact summary	Significance	Proposed mitigation
			appropriate locations on site if necessary or existing facilities must be used. Workers must be made aware of the risk of soil water contamination. Domestic waste must be disposed of in appropriate containers, and removed to the Nearest municipal waste-disposal site as part of existing waste management system.
	Soil compaction, loss of fertility and increased erosion	Low	Appropriate measures must be taken to reduce the risk of erosion from unprotected slopes i.e., Diversion berms, ponding pools, and not exceeding angles of repose of stockpiled material. All unprotected slopes must be Rehabilitated concurrent with construction.
	Fires	Low	Cooking and heating fires permitted only in designated areas with appropriate safety measures. Adequate firefighting equipment must be available, as prescribed by the relevant safety standards and legislation.
	Disturbance of fauna	Low	Only small animals occur in this area e.g., small rodents and reptiles. The area is surrounded by similar habitat and fauna is expected to move voluntarily to surrounding areas. No fauna found on the site will be killed.
	Disturbance of flora	High	Clearance of vegetation should be kept at a minimum and restricted to the proposed site boundary.
	Removal of indigenous vegetation	High	In the event of any Protected or Declining species being recorded

Activity	Impact summary	Significance	Proposed mitigation
			within the approved development
			site, permission for the removal of
			such species should be obtained
			from the Permitting Office of
			DESTEA, and the appropriate in
			situ and / or ex situ conservation
			measures should be developed and
			implemented with the approval of
			the DESTEA conservation
			authorities. Where feasible,
			protected or Declining species can
			be translocated to degraded or
			untransformed parts of the study
			area which provide potentially
			suitable habitat, but such
			translocations will have to be
			carried out in a way that ensures no
			ecological degradation of the host
			habitat occurs, and will have to be
			evaluated by an ecologist for each
			species and each potential
			translocation area. Alternatively,
			protected or Declining species can
			be rescued and donated to
			appropriate conservation and
			research institutions such as the
			Walter Sisulu National Botanical
			Garden (Roodepoort) or the
			Pretoria National Botanical Garden
			of SANBI
			Where possible, development
			should avoid habitat identified with
			high ecological sensitivity.
			According to the AIS regulations all
			declared alien weeds must be
			effectively controlled or eradicated.
	Safety	Low	Access to the construction site to be
			controlled at all times.
	Aesthetics	Low	If needed, an additional line of trees will be planted to minimise

Activity	Impact summary	Significance	Proposed mitigation					
			visual impact.					
	Indirect impacts: None							
	<i>Cumulative impacts:</i> None							
		Operational Phase						
	Manure	Low	Manure will be removed at the end of each cycle and will not be stockpiled on site. It will be processed on a different property and then be used as fertiliser on agricultural fields.					
	Carcasses	Low	The carcasses are removed on a daily basis and collected by a contractor.					
	Blood skins and DOA's	Low	Blood skins and DOA's will be collected by a contractor on a daily basis.					
	<i>Indirect impacts:</i> None							
	<i>Cumulative impacts:</i> None							

No-go optior	1		
	Direct impacts:		
	Positive impacts	Low	None
	Air quality and disturbance	Low	None
	Surface and groundwater		
	pollution	Low	None
	Sewage and domestic waste	Low	None
	Soil compaction, loss of fertility	Low	None
	and increased erosion		
	Fires	Low	None
	Disturbance of fauna	Low	None
	Safety	Low	None
	Aesthetics	Low	None
	Manure	Low	None
	Carcasses	Low	None
	Indirect impacts:		
	None		
	Cumulative impacts:		
	None		

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

# 2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment <u>after</u> 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.

# Alternative S1:

Impact no:	Extent	Duration	Intensity	Probability	Significance	
(As described in paragraphs 3 and 4 above)	Site Regional National	Short Medium	Low Medium High	Improbable Probable Definite	Low Medium High	
		Long	i ligit	Dominio	Unmitigated	Mitigated
	N PHASE					
impacts	Regional	Short	Low	Definite	High	High
2. Air quality and disturbance	Site	Short	Medium	Definite	Medium	Low
3. Surface and ground water	Site	Short	Low	Improbable	Low	Low
4. Uncontrolled sewage and domestic waste	Site	Short	High	Improbable	High	Low
5. Soil compaction, loss of fertility and increased erosion	Site	Long	Medium	Probable	High	Low
6. Fires	Site and Regional	Short	High	Improbable	High	Low
7. Disturbance of fauna	Site	Long	High	Definite	Low	Low
8. Disturbance of fauna	Site	Long	High	Definite	High	Low
9. Removal of indigenous vegetation	Site	Long	High	Definite	High	Low
10. Safety	Site	Short	High	Probable	High	Low
11. Aesthetics	Site and	Long	Low	Definite	Low	Low

# DRAFT BASIC ASSESSMENT REPORT - BEEFDOTCOM

	1			1		1
	Regional					
OPERATIONAL PHASE						
1. Sewage,	Cito	Long	Lliab	Definite	Lliab	Low
waste and litter	Sile	Long	підп	Dennite	пуп	LOW
2. Manure	Site	Long	High	Definite	High	Low
3. Wash water						
and possible	Site and	Long	High	Improbablo	High	Low
pollution of	Regional	Long	підп	Improbable	пуп	LOW
water	-					
4. Carcasses	Site	Long	High	Definite	High	Low
E Air pollution	Site and	Long		lwanzahahla	Madiuma	Law
5. Air poliution	Regional	Long	Medium	Improbable	wealuff	LOW
6. Positive	Site and	Long	Madium	Definite	High	Lliab
impacts	Regional	Long	weatum	Demnite	підп	підп

Alternative A1						
Impact no:	Extent	Duration	Intensity	Probability	Significance	
(As described in paragraphs 3 and 4 above)	Site Regional National	Short Medium Long	Low Medium High	Improbable Probable Definite	Low Medium High	
		- <b>J</b>	5		Unmitigated	Mitigated
1 Positive	Site and					
impacts	Regional	Short	Low	Definite	High	High
2. Air quality and disturbance	Site	Short	Medium	Definite	Medium	Low
<ol> <li>Surface and ground water</li> </ol>	Site	Short	Low	Improbable	Low	Low
4. Uncontrolled sewage and domestic waste	Site	Short	High	Improbable	High	Low
5. Soil compaction, loss of fertility and increased erosion	Site	Long	Medium	Probable	High	Low
6. Fires	Site and Regional	Short	High	Improbable	High	Low
7. Disturbance of fauna	Site	Long	High	Definite	Low	Low
8. Disturbance of fauna	Site	Long	High	Definite	High	Low
9. Removal of indigenous vegetation	Site	Long	High	Definite	High	Low
10. Safety	Site	Short	High	Probable	High	Low
11. Aesthetics	Site and Regional	Long	Low	Definite	Low	Low
OPERATIONAL	PHASE				ſ	
<ol> <li>Sewage, waste and litter</li> </ol>	Site	Long	High	Definite	High	Low
2. Manure	Site	Long	High	Definite	High	Low
3. Wash water and possible pollution of water	Site and Regional	Long	High	Improbable	High	Low
4. Carcasses	Site	Long	High	Definite	High	Low
5. Air pollution	Site and Regional	Long	Medium	Improbable	Medium	Low
6. Positive impacts	Site and Regional	Long	Medium	Definite	High	High
Impact no:	Extent	Duration	Intensity	Probability	Significance	

(As described in paragraphs 3 and 4 above)	Site Regional National	Short Medium Long	Low Medium High	Improbable Probable Definite	Low Medium High Unmitigated	Mitigated	
No-go alternativ	No-go alternative (compulsory)						
lana est a su	Extent	Duration	Intensity	Probability	Significance		
(As described in paragraphs 3 and 4 above)	Site Regional National	Short Medium Long	Low Medium High	Improbable Probable Definite	Low Medium High Unmitigated	Mitigated	
CONSTRUCTIO	N PHASE	•					
1.Positive impacts	Site	Short	Low	Improbable	High	High	
2. Air quality and disturbance	Site	Short	Medium	Definite	Medium	Medium	
3. Surface and ground water	Site	Short	Low	Improbable	Low	Low	
4. Uncontrolled sewage and domestic waste	Site	Short	High	Improbable	Low	Low	
5. Soil compaction, loss of fertility and increased erosion	Site	Medium	Medium	Definite	Low	Low	
6. Fires	Site and Regional	Short	High	Improbable	High	Low	
7. Disturbance of fauna	Short	Long	High	Definite	Low	Low	
8. Safety	Site	Short	High	Improbable	Low	Low	
9. Aesthetics	Site and Regional	Short	Low	Definite	Low	Low	
OPERATIONAL	PHASE			1	1		
1. Sewage, waste and litter	Site	Long	High	Improbable	Low	Low	
2. Manure	Site	N/A	High	Improbable	High	Low	
3. Wash water and possible pollution of water	Site and Regional	N/A	High	Improbable	High	Low	
4. Fat and organic solid waste	Site	N/A	High	Improbable	High	Low	
5. Air pollution	Site and Regional	Short	Medium	Definite	Medium	Medium	
6. Positive impacts	Site and Regional	Long	Medium	Improbable	High	High	

# SECTION E: RECOMMENDATION OF 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)?

YES √ NO

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

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.

Is an EMPr attached?



The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Dr. Hélen Prinsloo

NAME OF EAP

200

SIGNATURE OF EAP

<u>05/07/2023</u> DATE

# **SECTION F: APPENDICES**

The following appendixes must be attached:

Appendix A: Maps  $\sqrt{}$ 

Appendix B: Photographs  $\sqrt{}$ 

Appendix C: Facility illustration(s)  $\sqrt{}$ 

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation  $\sqrt{}$ 

Appendix F: Impact Assessment  $\sqrt{}$ 

Appendix G: Environmental Management Programme (EMPr)  $\sqrt{}$ 

Appendix H: Details of EAP and expertise  $\sqrt{}$ 

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information - will be attached to FBAR