

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:

- This basic assessment report is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 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.
- This report format is current as of 08 December 2014. 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 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.

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- 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

The development will entail the development of a residential area. The development will involve plot 147. These plots form part of Bloemspruit Agricultural Plots. The plot is situated on the corner of Vooruitsig street and Kendal street. The coordinates for the site is Lat: -29.132213° Long: 26.280615°.

The entire area has an extent of 4.2827 ha. The area for the development will be 4.277 ha. There will be four entrances to the site, 3 from Kendal street and 1 from Vooruitsig Street. The development will include 80 residential stands, road infrastructure and installation of services. Construction of the residential developments will necessitate clearing of vegetation and levelling of the site where necessary.

In the South Western corner of plot 147 there is a dilapidated old house and surrounding buildings. The remainder of the site is grassland that has been disturbed.

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

Listed activity as described in GN 983,984 and 985	Description of project activity
Example: GN 983 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river
GN 983 Item 27: The clearance of 1 ha or more, but less than 20 hectares of indigenous vegetation.	An area of approximately 4.2 ha of indigenous vegetation will be cleared to construct the road infrastructure and erven.

#### 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 982, Regulation 2014. 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

#### Note:

The plot considered for development is the only property in the area that the applicant owns; therefore the only alternatives considered will be other layout strategies on plot 147.

Alternative 1 (preferred alternative)				
Description	Lat (DDMMSS)	Long (DDMMSS)		
Centre point	29°07'55.97"S	26°16'50.21"E		
	Alternative 2			
Description	Lat (DDMMSS)	Long (DDMMSS)		
Centre Point	29°07'55.97"S	26°16'50.21"E		
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)		
Starting 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

End point of the activity

Middle/Additional point of the activity

Alternative 1 (preferred alternative)				
Description	Lat (DDMMSS)	Long (DDMMSS)		
The development will feed into the Municipal sewage and water				
system.				
Alternative 2				
Description	Lat (DDMMSS)	Long (DDMMSS)		
As the area is not yet connected to all municipal services				
therefore septic tanks was considered as a possibility. It is a				
viable solution but will have disadvantages to the municipal				
sewage services.				
Alternative 3				
Description	Lat (DDMMSS)	Long (DDMMSS)		

# c) Technology alternatives: None

Alternative 1 (preferred alternative)	
Alternative 2	
Alternative 3	

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives): NONE

Alternative 1 (preferred alternative)			
Alternative 2			
Alternative 3			

e) No-go alternative

Should the no-go alternative be considered no environmental impact will occur but the opportunity to create temporary jobs during the construction phase will be lost. The possibility to provide small houses for the people in the area will also be lost.

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: Size of the activity:

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

Alternative A3 (if any)

OIZC (	or the detivity.
	42 770 m <sup>2</sup>
	42 770 m <sup>2</sup>
	m <sup>2</sup>

or, for linear activities:

Alternative:
Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Longin of the donvity	•
	m
	m
	3

I enoth 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)

Size	of the	site/	serv	vitu	ide:
OILC	VI 1110	JILLI	<b>501</b>	,,,,	uc.

 •	
	m <sup>2</sup>
	m <sup>2</sup>
	m <sup>2</sup>

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

#### 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

YES	NO
	m

Describe the type of access road planned:

N/A - Access road is already established.

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
  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	
That area is zoned as a neighbourhood district therefore the township development falls within the land use rights.				

#### 2. Will the activity be in line with the following? (a) Provincial Spatial Development Framework (PSDF) YES NO Please explain The Free State PSDF is based upon, and promotes, an integrated and holistic approach to spatial planning and land-use management which implies that the interrelationships between economic activities and other developmental dimensions (e.g. social, financial, demographic, institutional, and infrastructural aspects), and environmental constraints and opportunities are carefully considered in accordance with a standard framework and at all applicable spheres of planning, ranging from the international to the local level. (b) Urban edge / Edge of Built environment for the area YES NO Please explain The project falls well within the urban Edge. (c) Integrated Development (IDP) Plan and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise YES NO Please explain the integrity of the existing approved and credible municipal IDP and SDF?). The activity will not compromise the integrity of the existing IDP and SDF of the Mangaung Metro Municipality as it is privately operated and privately owned. YES (d) Approved Structure Plan of the Municipality NO Please explain The area is zoned as neighbourhood district therefore this will be in line with the approved structure plan. **Environmental Management Framework (EMF)** (e) An adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing YES NO Please explain environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?) The project will not compromise the environmental Management Framework of the Department as the zoning of the area is agricultural plots. YES Any other Plans (e.g. Guide Plan) NO Please explain N/A 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 YES Please explain NO authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)? That area is zoned as a neighbourhood district therefore the township development falls within the land use rights.

lar the na	pes the community/area need the activity and the associated and use concerned (is it a societal priority)? (This refers to e strategic as well as local level (e.g. development is a attional priority, but within a specific local context it could be appropriate.)	YES	NO	Please explain
The pr	roject is not a priority to the community but could create low cost re	esidentia	l option	s for the area.
ava ca (Co be	e the necessary services with adequate capacity currently ailable (at the time of application), or must additional pacity be created to cater for the development? onfirmation by the relevant Municipality in this regard must attached to the final Basic Assessment Report as opendix I.)	YES	NO	Please explain
	onal capacity will have to be created as no services are available a flangaung will be attached in the Final Basic Assessment.	at this tim	ie. Cor	nfirmation
pla im mu op thi	this development provided for in the infrastructure anning of the municipality, and if not what will the plication be on the infrastructure planning of the unicipality (priority and placement of services and portunity costs)? (Comment by the relevant Municipality in its regard must be attached to the final Basic Assessment eport as Appendix I.)	YES	NO	Please explain
This ar	rea is set out for the neighbourhood development of Bloemfontein	, the Mur	nicipalit	ies comments
will be	attached in the Final Basic Assessment Report in appendix I.			
	this project part of a national programme to address an sue of national concern or importance?	YES	NO	Please explain
The pr	oject is not of national concern.			
act co	location factors favour this land use (associated with the tivity applied for) at this place? (This relates to the intextualisation of the proposed land use on this site within broader context.)	YES	NO	Please explain
	rea is set out for the neighbourhood development of Bloemfontein opment is a favourable land use.	; therefo	re town	ship
	the development the best practicable environmental option r this land/site?	YES	NO	Please explain
	te is currently empty and the field is degraded condition. The town cal option for the area.	nship dev	/elopm	ent is a good

10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain			
The proposed area is already disturbed, thus the impact on the area will	be limite	d.				
The proposed project will benefit the community as it will bring low cost residential erven to the area.  The project will not use a large number of unskilled employees but it will create temporary job opportunities for the local community during the construction phase.						
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain			
The area is earmarked for residential development, therefore no precede	ent will be	e set.				
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain			
The site is currently empty. A Public Participation process will be done to	ensure	that all	I the			
surrounding landowners are informed of the project and do not have any	concern	s rega	rding the			
project.						
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	NO	Please explain				
The proposed activity falls well within the Urban Edge.						
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain			
N/A						
15. What will the benefits be to society in general and to communities?	the lo	cal	Please explain			
Low cost residential housing to surrounding community. Some job opport	rtunities	during	the			
construction phase of the project.						
16. Any other need and desirability considerations related to the proposed activity?						
The proposed residential development is essential to provide for an ever growing population. The area where this residential is proposed has been identified by the Mangaung SDF as an area to be developed for residential housing.						
17. How does the project fit into the National Development Plan for 2030? Please explain						
N/A - The project has no significance on the National Development plar	۱.	L				

# 18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

An assessment has been undertaken to evaluate potential impacts and give mitigation measures to lower the impacts on the environment, social conditions and cultural heritage due to the township development. A public participation was undertaken i. t. o the 2014 EIA Regulations.

Consideration of environmental attributes in management and decision-making which may have a significant effect on the environment will be ensured; and

The modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2 of the NEMA will be identified and employed.

# 19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

The following principles have been taken into account:

- Avoiding or minimizing the disturbance to ecosystems;
- That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimized and remedied;
- That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimized and remedied;
- That waste is avoided, or where it cannot be altogether avoided, minimized and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
- That the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardized;
- That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;
- That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.
- Promotion of community participation through an extensive and open public participation process with I&APs;

Delivery of high quality information to government and other decision-makers in order to enable them to make inform decisions.

# 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	Competent authority that have	Department of	1998
Management Act (Act 107	to approve the Environmental	Environmental	

of 1998)	Authorisation. Consultation with DESTEA regarding the project.	Affairs and Tourism	
Occupational Health and Safety Act (Act 85 of 1993)		South African Department of Labor	1993
National Heritage Resources Act (Act 25 of 1999)	An area larger than 500 m2 will be cleared for the construction of the facility. Should any heritage sites be uncovered, SAHRA should be informed.	South-African Heritage Resources Agency	1999

# 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 m³

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

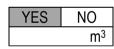
How will the construction solid waste be disposed of (describe)?

Construction solid waste will be used as filling or disposed of at the local Bloemfontein Landfill Site

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

Construction solid waste will be disposed of at the local Bloemfontein Landfill Site

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)?



Non-biodegradable waste such as glass bottles, plastic bags, metal scrap etc. generated by activities during operational phase will be disposed and stored in suitable containers at a collecting point and collected and disposed off at the nearest authorized facility.

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

The nearest authorized facility in Bloemfontein

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

N/A

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.

If YES, inform th	the solid waste be classified as hazardous in terms of the NEM:WA? YES NO e competent authority and request a change to an application for scoping and EIA. An waste permit in terms of the NEM:WA must also be submitted with this application.				
If YES, then the necessary to cha	at is being applied for a solid waste handling or treatment facility?  YES NO e applicant should consult with the competent authority to determine whether it is ange to an application for scoping and EIA. An application for a waste permit in terms must also be submitted with this application.				
b) Liquid e	effluent				
in a municipal s If YES, what es Will the activity If YES, the app	produce effluent, other than normal sewage, that will be disposed of sewage system?  Stimated quantity will be produced per month?  Produce any effluent that will be treated and/or disposed of on site?  WES NO  WIGHTINGTON  WIGHTINGTON  WICH THAN 1987  WES NO  WIGHTINGTON  WICH THAN 1987  WES NO  WIGHTINGTON  WITH THAN 1987  WES NO  WITH THAN 1987  WITH THAN 1987  WITH THAN 1987  WES NO  WES NO				
facility?	produce effluent that will be treated and/or disposed of at another  YES NO he particulars of the facility:				
Contact person: Postal address:					
Postal code: Telephone: E-mail:	Cell: Fax:				
Describe the me	asures that will be taken to ensure the optimal reuse or recycling of waste water, if any:				
c) Emissio	ons into the atmosphere				
and dust associand the second of the second	release emissions into the atmosphere other that exhaust emissions atted with construction phase activities?  rolled by any legislation of any sphere of government?  cant must consult with the competent authority to determine whether it is necessary to plication for scoping and EIA.  the emissions in terms of type and concentration:  sion will be construction related i.e. exhaust emissions and dust from the construction				
vehicles.					

#### d) Waste permit

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

YES NO

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

YES	NO
YES	NO

Describe the noise in terms of type and level:

During the construction phase construction activities will generate noise. But measures will be put in place to reduce the noise. Construction activities will be limited to daylight hours and speed limits will be imposed on all construction vehicles. Elevated noise levels will only be during the construction phase, thus temporary in nature. The activity in the operational phase will generate no noise. There are no houses and/or other receptors in close proximity, thus the impact will be small.

#### 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	River, stream,	Other	The activity will
Municipal	vvater board	Groundwater	dam or lake	(Borehole)	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:

YES NO

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.

#### 14. ENERGY EFFICIENCY

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

N/A

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

15

N/A		

#### SECTION B: SITE/AREA/PROPERTY 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

  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 description/physical address:

Province	Free State
District	Mangaung Metro Municipality
Municipality	
<b>Local Municipality</b>	Mangaung Metro Municipality
Ward Number(s)	17
Farm name and	Plot 147, Bloemspruit Agricultural Plots
number	·
Portion number	0
SG Code	F00300190000014700000

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Agriculture Holding			

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
1 - 0	110

#### 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

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

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

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

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

YES	NO
YES	NO
YES	NO
YES	ОИ
YES	NO

Alternative S1:

(if any):									

Alternative S2

NO
NO

Alternative S3

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 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

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

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	of the	boxes	marked	YES	or	UNSURE	is	ticked,	please	provide	а	description	of	the	relevant
waterco	ourse.														

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#### 6. LAND USE CHARACTER OF SURROUNDING AREA

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: The area is zoned as Agricultural plots.

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station H
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 N	Museum
Power station	Major road (4 lanes or more) N	Historical building
Office/consulting room	Airport N	Protected Area
Military or police	Harbour	Gravovard
base/station/compound		Graveyard
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 "N" "are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

#### N/A

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:

# N/A

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:

#### N/A

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
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

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
Uncertain

Dr. Lloyd Rossouw indicated that exemption can be given from doing a Phase 1 Heritage Impact Assessment as the potential for archaeological impact at the site is considered to be non-existent. The exemption letter is attached as Appendix D.

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? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO
YES	NO

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:

27.7% and the youth unemployment is 37.2% (Stats SA 2011)

Economic profile of local municipality:

A total of211 746 people are employed while 18 244 are discouraged work-seekers. According to Census 2011, 81 225 people are unemployed; making the unemployment rate stand at 37%. Of the 150 128 economic active youth aged 15–34, 94 281 are employed and 55 847 are unemployed.

Level of education:

3.7% have a higher education, 16.5% completed secondary school and 30.6% have some secondary

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schooling. 5.4% have completed primary school while 37.7% have some primary school experience. 3.3% have no schooling experience (Stats SA 2011).

# b) Socio-economic value of the activity

What is the expected capital value of the activity on completion? What is the expected yearly income that will be generated by or as a result of the 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 construction phase of the activity/ies? What is the expected value of the employment opportunities during the R development and construction phase? What percentage of this will accrue to previously disadvantaged individuals? % How many permanent new employment opportunities will be created during the operational phase of the activity? What is the expected current value of the employment opportunities during the R first 10 years? What percentage of this will accrue to previously disadvantaged individuals? %

#### 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)

Systemati	c Biodiversi	ty Planning	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)	

# b) Indicate and describe the habitat condition on site

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	%	5
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	80
Degraded (includes areas heavily invaded by alien plants)	%	10
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	%	5

#### Complete the table to indicate: c)

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

Terrestrial Ecos	Aquatic Ecosystems							
Ecosystem threat	Critical			ling rivers,				
status as per the National	Endangered	depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial			Ectuer.		Coastline	
Environmental	Vulnerable			Estuary		Coastiiii		
Management:	Least	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)

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# **SECTION C: PUBLIC PARTICIPATION**

# 1. ADVERTISEMENT AND NOTICE

Publication name	EIA Process	
Date published	16/07/2015	
Site notice position	Latitude	Longitude
	29°07'59.41"S	26°16'49.83"E
	29°07'54.53"S	26°16'47.63"E
Date placed	15/07/2015	

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 982

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 982

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr. P.T. Du Toit	Adjacent Landowner	P.O. Box 28880 Danhof
		9310
Mr. H.J. Nieuwenhuizen	Adjacent Landowner	P.O. Box 6680
		Bloemfontein
		9300
Mr. T.A. Jobo	Adjacent Landowner	P.O. Box 19093
		Bloemspruit
		9364
Mr. A.B. Ruiters	Adjacent Landowner	P.O. Box 21259
		Heidedal
		9306
Mr. A.J.R. Campbell	Adjacent Landowner	Schnehage Crescent 112
		Fichardtpark
		9301
Basfour 865 (Pty) Ltd.	Adjacent Landowner	P.O. Box 4103
		Bloemfontein
		9300
Ms. G.B. Marais	Adjacent Landowner	P.O. Box 19379
		Bloemspruit
M FF II W		9364
Mr. E.E. Hattingh	Adjacent Landowner	P.O. Box 100947
		Brandhof
2.4		9324

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		
Mr. Jobo wanted a meeting.	Mr. Jobo was informed via telephone of a meeting on-site on 6 Aug '15.		

#### 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 Final BAR as Appendix E3.

# 5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Orga n of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Free State Department of Economic Development,Touri sm and Environmental Affairs	Mrs. Grace Mkhosana	051 400 4843	051 400 4842	Mkhosana@detea.fs.g ov.za	Private Bag X20801 Bloemfontein 9300
Department of agriculture, forestry & fisheries	Mr. Jack Morton	051 861 8369	086 234 6758	jack@fs.agric.za	P/Bag X01 Glen 9360
Department of Water Affairs	Mr. George Nel	051 405 9265		NelG@dwa.gov.za	PO Box 528 Bloemfontein 9300
SAHRA	Mr. Andrew Salomon	021 462 4502	021 462 4549	asalomon@sahra.org. za	P.O. Box 4637 Cape Town

					8001
Ms.S. Mazibuko (Municipal Manager)	Mangaung Metro Municipality	051 405 8911	051 405 8108	Nthabiseng.matsoake @mangaung.co.za	PO Box 3704 Bloemfontein 9300
Ward Councillor, Ward 17 Ms. NA Phupha	Mangaung Metro Municipality	082 821 9306 (Cell)	051 405 8108	N.A.phupha@mangau ng.co.za	
Mr. Collin Dihemo	Mangaung Metro Municipality: Planning Department	051 405 8740		collin.dihemo@manga ung.co.za	PO Box 3704 Bloemfontein 9300
Ms. Mpolokeng Kolobe	Mangaung Metro Municipality: Environmental Department	051 405 8577 (Tel)	051 405 8883	Mpolokeng.kolobe@m angaung.co.za	PO Box 3704 Bloemfontein 9300

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 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 (	Alternative 1 (preferred alternative)					
Construction phase	Direct impacts:		<ul> <li>Clearance of Vegetation will be limited to the site under construction</li> <li>The surface of the site will be levelled to ensure free-draining to prevent ponding of surface water</li> <li>Storm water measures such as channels, diversion berms, etc will be constructed around the site</li> </ul>			
	- Potential erosion of exposed soil - Possible dumping of construction rubble and general waste on site - Petrochemical spills may take place that may lead to pollution of groundwater - Deterioration of the access road as a result of an increase of construction vehicles to the site.		in order to limit and/or prevent erosion  - A speed limit will be enforced on construction vehicles  - Construction will be limited to daytime to limit any disturbance to neighbouring landowners  - Dust control measurements will be investigated if nuisance dust generation proofs to be problematic  - SAHRA will be notified should traces of any paleontological heritage be			

Activity	Impact summary	Significance	Proposed mitigation
			found during construction.  - All building rubble will be removed by the contractor on a regular basis and disposed of at an authorised landfill site in the area or used as filling material.  - Receptacles should be placed on site for the collection of general waste. These receptacles should be emptied on a regular basis and waste be disposed of at the authorised landfill site in the area.
	Cumulative impacts: None		
Operational Phase	Direct impacts:  Potential pollution to storm water if proper storm water management measures are not implemented.  Potential pollution to the groundwater due to seepage of the untreated effluent to the groundwater aquifer in the event of any spillage and / or failure of the system  Possible dumping of general waste on site  Indirect impacts:  Accumulation of waste that may pose health risks if not managed properly and not removed on a regular basis.  Deterioration of the access road as a result of increased traffic to the site.  Cumulative impacts:		<ul> <li>The storm water management measures that will be constructed and implemented during construction will be maintained and repaired when necessary.</li> <li>General waste (i.e. paper, plastic, glass etc.) will be collected and disposed of at an authorised</li> <li>The access road will have to be upgraded when necessary</li> <li>The sewer reticulation, together with its connection to the sewer outfall, will be a prerequisite for the erection of any buildings. The municipality is in the process of addressing this issue.</li> <li>The access road will be</li> </ul>
	Increase in traffic on the access road may lead to the deterioration of the		monitored and repair when necessary.
	road.		
Alternative 2	Direct importor		Clearance of Vegeteties
	Direct impacts:		<ul> <li>Clearance of Vegetation will be limited to the site under construction</li> <li>The surface of the site will</li> </ul>

Activity	Impact summary	Significance	Proposed mitigation
Activity	Impact summary  - Possible change in the natural storm water drainage pattern - Noise elevation due to construction activities - Nuisance due to dust generation  Indirect impacts: - Potential erosion of exposed soil - Possible dumping of construction rubble and general waste on site - Petrochemical spills may take place that may lead to pollution of groundwater  Deterioration of the access road as a result of an increase of construction vehicles to the site.	Significance	be levelled to ensure free- draining to prevent ponding of surface water  - Storm water measures such as channels, diversion berms, etc will be constructed around the site in order to limit and/or prevent erosion  - A speed limit will be enforced on construction vehicles  - Construction will be limited to daytime to limit any disturbance to neighbouring landowners  - Dust control measurements will be investigated if nuisance dust generation proofs to be problematic  - SAHRA will be notified should traces of any paleontological heritage be found during construction.  - All building rubble will be removed by the contractor on a regular basis and disposed of at an authorised landfill site in the area or used as filling material.  - Receptacles should be placed on site for the collection of general waste. These receptacles should be emptied on a regular basis and waste be disposed of at
	Cumulative impacts: None		the authorised landfill site in the area.
	Direct impacts:  - Potential pollution to storm water if proper storm water management measures are not implemented.  - Potential pollution to the		- The storm water management measures that will be constructed and implemented during construction will be maintained and repaired

Activity	Impact summary	Significance	Proposed mitigation
	groundwater due to seepage of the untreated effluent to the groundwater aquifer in the event of any spillage and / or failure of the system - Possible dumping of general waste on site  Indirect impacts: - Accumulation of waste that may pose health risks if not managed properly and not removed on a regular basis.  Deterioration of the access road as a result of increased traffic to the site.		when necessary. General waste (i.e. paper, plastic, glass etc.) will be collected and disposed of at an authorised The access road will have to be upgraded when necessary The sewer reticulation, together with its connection to the sewer outfall, will be a prerequisite for the erection of any buildings. The municipality is in the process of addressing this issue.
Altamatica 2	Cumulative impacts: Increase in traffic on the access road may lead to the deterioration of the road.		The access road will be monitored and repair when necessary.
Alternative 3	Dina di ina a da		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go option			
	Direct impacts: None		
	Indirect impacts: _Jobs will be lost during the construction phase		
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 982 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 A (preferred alternative)

The proposed project will entail the development op 80 erven on plot 147, Bloemspruit Agricultural plots, Bloemfontein. Ready access to the site is already in place. Basic services like water and sewage will have to be connected to the current municipal services if approved by Mangaung Metro.

#### Alternative B

# Alternative C

# No-go alternative (compulsory)

No environmental impacts will occur if the no-go alternative is accepted. Temporary jobs will be lost during the construction phase. An opportunity will be lost to better the community by upgrading and disturbed plot to 80 houses.

# 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
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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.

In addition to the recommended mitigation and management measures described in section D, the following measures are recommended:

- That the site must be levelled and all vegetation and topsoil removed from the site.
- Measures to manage storm water and waste will be implemented and maintained to prevent erosion and pollution.
- Receptacles should be placed on site for the collection of general waste during construction and operation. These receptacles should be emptied on a regular basis and waste be disposed of at an authorised landfill site in Bloemfontein.
- No construction and / or any other waste will be dumped in the veld or on site
- SAHRA will be notified should traces of any paleontological heritage be found during construction.

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.

NAME OF EAP	
SIGNATURE OF EAP	DATE
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"JWALE KE NAKO YA KOTULO, RE A KUBELETSA"

# **SECTION F: APPENDIXES**

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information