

# THE PROPOSED ESTABLISHMENT OF APPROXIMATELY 19.8HA OF AGRICULTURAL FIELDS AND ASSOCIATED INFRASTRUCTURE ON ERF 1181, KAKAMAS



Draft Basic Assessment Report

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# PREPARED FOR:



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# THE PROPOSED ESTABLISHMENT OF APPROXIMATELY 19.8HA OF AGRICULTURAL FIELDS ON ERF 1181, KAKKAMAS

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	(For official use only)		
File Reference Number:			
Application Number:			
Date Received:			



# Basic Assessment Report in terms of the Environmental Impact Assessment Regulations, 2014 (as amended), 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 competent authority for the activity that is being applied for.
- It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 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.
- Where applicable **tick** the boxes that are applicable in the report.
- An incomplete report may be returned to the applicant for revision.
- 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.
- This report must be handed in at the offices of the relevant competent authority as determined by each authority.
- No faxed or e-mailed reports will be accepted.
- The signature of the EAP on the report must be original.
- The report must be compiled by an independent environmental assessment practitioner.
- 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 request report, during any stage of the application process.
- A competent authority may require that for specified types of activities in defined situations only parts
  of this report need to be completed.
- 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.



# **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 titled "Details of specialist and declaration of interest" for the specialist appointed and attach it in Appendix I.

# 1) ACTIVITY DESCRIPTION

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

The development proposal entails the clearance of approximately 19.8ha of indigenous vegetation on Erf 1181, Kakamas and establishing agricultural fields thereon. The agricultural fields will be used for:

- Providing accredited and non-accredited training (practical and theory), specializing in viticulture.
- ii. conducting research and development work for the South African raisin industry
- iii. Demonstrating technology and innovative ideas commercially.

The infrastructure to be established on the proposed site includes inter alia,

- Irrigation pipelines and pump station,
- Water storage dam,
- Guardroom with toilet,
- Road for accessing different parts of the proposed site
- Packsheds and other buildings in which the processing of the agricultural produce will take place,
- Drying beds for placing harvested grapes on until raisins result
- Administrative office(s), etc

The development proposal will be supplied with potable water, electricity, wastewater disposal, green waste disposal and refuse disposal by the Kai! Garib Local Municipality.

Access to and from the proposed site exists via the N14 National Road.



# 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			
EIA Regulations of 2014 (as amended)				
ON COTAL III N. III				
GN 327 Listing Notice 1	The proposed development includes			
<b>Item 8</b> , <i>i.e.</i> , "The development and related operation of hatcheries or agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more"	The proposed development includes drying beds on which grapes will be dried to produce raisins that will be further processed in packsheds and the development footprint of these exceeds 2000m <sup>2</sup> .			
Item 9, i.e., "The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area".	The proposed development requires that a pipeline of more than 1000m for the bulk transportation of water be installed and the internal diameter of the pipeline will be 0.36m or more. In addition, the location of the proposed pipeline and associated infrastructure is outside of the built-up part of the town of Kakamas, <i>i.e.</i> , outside the urban area.			
Item 12, i.e., "The development of; (iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size; (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs; (a) within a watercourse; (b) in front of a development setback; or	The proposed development includes infrastructure with a total development footprint bigger than 100m <sup>2</sup> within 100m of the large on-site drainage line and the tributaries of the said drainage line.			
<ul> <li>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;</li> <li>— excluding— <ul> <li>(aa) the development of infrastructure or structures</li> </ul> </li> </ul>				
within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related				
to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in Activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area;				
(ee) where such development occurs within existing roads, road reserves or railway line reserves; or				
(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.				
Item 13, i.e., "The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014".	The proposed development includes an off-stream water storage dam of a capacity greater than 50 000m <sup>3</sup>			



Item 19, i.e., "The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic meters from a watercourse"

The proposed development includes excavation and moving of material within 32m of the tributaries of the large drainage line.

**Item 27,** i.e., "The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—

The establishment of the proposed agricultural fields and associated infrastructure requires that approximately 19.8ha of indigenous vegetation be cleared

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan".

## **GN 324 Listing Notice 3**

Item 8, i.e., "The development and related operation of hatcheries or agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more"

The proposed development includes drying beds on which grapes will be dried to produce raisins that will be further processed in packsheds and the development footprint of these exceeds 2000m<sup>2</sup>.

**Item 9**, i.e., "The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—

- (i) with an internal diameter of 0,36 metres or more; or
- (ii) with a peak throughput of 120 litres per second or more; excluding where—
- (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or
- (b) where such development will occur within an urban area".

The proposed development requires that a pipeline of more than 1000m for the bulk transportation of water be installed and the internal diameter of the pipeline will be 0.36m or more. In addition, the location of the proposed pipeline and associated infrastructure is outside of the built-up part of the town of Kakamas, *i.e.*, outside the urban area.

Item 12, i.e., "The development of;

(iv) dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size; (xii) infrastructure or structures with a physical footprint of 100 square metres or more;

where such development occurs;

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;
- excluding—

(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour:

(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in Activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;

- (dd) where such development occurs within an urban area:
- (ee) where such development occurs within existing roads, road reserves or railway line reserves; or

The proposed development includes infrastructure with a total development footprint bigger than 100m<sup>2</sup> within 100m of the large on-site drainage line and the tributaries of the said drainage line.



(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared".	
Item 13, i.e., "The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014".	The proposed development includes an off-stream water storage dam of a capacity greater than 50 000m <sup>3</sup>
Item 19, i.e., "The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic meters from a watercourse".	The proposed development includes excavation and moving of material within 32m of the tributaries of the large drainage line.
Item 27, i.e., "The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—	The establishment of the proposed agricultural fields and associated infrastructure requires that approximately 19.8ha of indigenous vegetation be cleared
(i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan".	

# 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), 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 accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The coordinates 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.



# **Need and Desirability**

It is stated in the 2017 to 2022 IDP of the ZF Mgcawu District Municipality that the said municipality accounts for approximately 30% of the Northern Cape economy and the population of the municipal area is continuing to grow.

It is also indicated in the IDP of the district municipality that Critical Actions to be taken by the municipality include inter alia, "1. A social compact to reduce poverty and inequality, and raise employment and investment and 2. A strategy to address poverty and its impacts by broadening access to employment, strengthening the social wage, improving public transport and raising rural incomes ".

The proposed establishment of agricultural fields and associated infrastructure on Erf 1181, Kakamas will provide short-term employment during the development phase and long-term employment during the operational phase. These employment opportunities to be provided by the proposed development are highly needed in the administrative area of the ZF Mgcawu District Municipality, as these employment opportunities will enable the employees at the proposed development to rise to a position where they are better able to economically sustain themselves and their families. Furthermore, the economic benefits of the establishing the proposed development will extend to the economy of the local area when the money earned by the employees at the proposed development is spent on goods supplied by businesses in the local area.

In addition, the proposed site is next to existing active agricultural fields and agri-industries. The likely terrestrial ecology, freshwater ecology and heritage-related impacts of the proposed development will remain low when the recommendations contained in the specialist reports and in the EMPr are implemented.

In view of the above, the proposed establishment of agricultural fields and associated infrastructure , Kakamas is highly desirable.

# a) Site alternatives

The proposed site is located in a farming area just west of the town of Kakamas and is close to existing agricultural fields and agro-industries.

The potential impacts of the proposed agricultural fields in the agricultural area will remain low as a result of the implementation of the recommendations specified in the specialist reports attached to this Draft BAR and the implementation of the EMPr and conditions of environmental authorisation. In addition, Erf 1181, Kakamas is owned by the applicant. This increases the suitability level of the proposed site for the proposed development and significantly lowers the necessity for time and effort to be spent investigating other site alternatives.

In view of the above, the proposed site is the preferred site alternative and is the only site alternative that the applicant has considered.

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

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

<b>Detailed</b> description	of lighted postivistic	as associated with	the project
Detailed description	i ot listed activitie	as associated with	the project



Description of project activity that triggers listed activity Listed activity as described in GN R. 984 of 2014 (as amended). Item 8, i.e., "The development and The proposed development includes drying beds related operation of hatcheries or agrion which grapes will be dried to produce raisins industrial facilities outside industrial that will be further processed in packsheds and complexes where the development the development footprint of these exceeds footprint covers an area of 2 000 square 2000m<sup>2</sup>. metres or more" Item 9, i.e., "The development of The proposed development requires that a pipeline of more than 1000m for the bulk infrastructure exceeding 1 000 metres in transportation of water be installed and the length for the bulk transportation of water internal diameter of the pipeline will be 0.36m or or storm watermore. In addition, the location of the proposed (i) with an internal diameter of 0,36 metres or more; or pipeline and associated infrastructure is outside (ii) with a peak throughput of 120 litres of the built-up part of the town of Kakamas, i.e., per second or more; outside the urban area. excluding where-(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area". Item 12, i.e., "The development of; The proposed development includes (iv) dams, where the dam, including infrastructure with a total development footprint infrastructure and water surface area, bigger than 100m<sup>2</sup> within 100m of the large onexceeds 100 square metres in size; site drainage line and the tributaries of the said (xii) infrastructure or structures with a drainage line. physical footprint of 100 square metres or more: where such development occurs; (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse: excluding-(aa) the development infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies: (cc) activities listed in Activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;



(dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads, road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.	
Item 13, i.e., "The development of facilities or infrastructure for the off- stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such storage falls within the ambit of activity 16 in Listing Notice 2 of 2014".	The proposed development includes an off- stream water storage dam of a capacity greater than 50 000m <sup>3</sup>
Item 19, i.e., "The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic meters from a watercourse"	The proposed development includes excavation and moving of material within 32m of the tributaries of the large on-site drainage line.
Item 27, i.e., "The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—  (i) the undertaking of a linear activity; or	The establishment of the proposed agricultural fields and associated infrastructure requires that approximately 19.8ha of indigenous vegetation be cleared
(ii) maintenance purposes undertaken in accordance with a maintenance management plan".	
Listed activity as described in GN R. 986 of 2014 (as amended)	Description of project activity that triggers listed activity
Item 12, i.e., "The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	The establishment of the proposed agricultural fields requires that more than 300m² of indigenous vegetation be cleared on Erf 1181, Kakamas and the erf overlaps an area identified as a Critical Biodiversity Area.
g. Northern Cape	
i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;	



ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high-water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or iv. On land, where, at the time of the

iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning".

**Item 14**, *i.e.*, "The development of—

(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or

- (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs—
- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour

## g. Northern Cape

i. In an estuary;

ii. Outside urban areas:

(aa) A protected area identified in terms of NEMPAA, excluding conservancies;

(bb) National Protected Area Expansion Strategy Focus areas;

(cc) World Heritage Sites;

(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;

(ee) Sites or areas identified in terms of an international convention;

(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

(gg) Core areas in biosphere reserves;

The proposed development requires that infrastructure exceeding 10m² in size be established within 32m of the on-site drainage lines.



(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;
(ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is

ii. Inside urban areas:

determined; or

(aa) Areas zoned for use as public open space;

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or (cc) Areas seawards of the development setback line".

# b) Layout alternatives

The development proposal entails establishing approximately 19.8ha agricultural fields, a water supply pipeline, water storage dam, irrigation infrastructure, drying beds for turning grapes into raisins, packsheds and other associated structures and infrastructure. The proposed site will be occupied chiefly by the agricultural fields, with the associated structures and infrastructure making up only a small fraction of the development footprint. It is therefore unlikely that any significant advantage may be gained by to investigating different layout alternatives for the proposed development. In view of this, layout alternatives have not been considered.

## c) Design alternatives

N/A

Alternative 1 (preferred alternative)
See "ACTIVITY DESCRIPTION" in this Draft BAR.

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

NA

Alternative 1 (preferred alternative)				
N/A				
Alternative 2				
N/A				
	Alternative 3			
N/A				



## e) No-go alternative

The no-go alternative entails maintaining the *status quo*. This means that in spite of the anticipated low terrestrial biodiversity, freshwater ecological and heritage-related impacts, the Applicant would let Erf 1181, Kakamas remain a vacant parcel of land and the significant social and economic benefits that are expected from implementing the proposed development would not materialise.

In light of the major need to create employment opportunities in the ZF Mgcawu District Municipal Area as is stated in the IDP of the municipality, adopting the 'no-go' alternative would be highly undesirable. The 'no-go alternative should therefore be discarded and the preferred alternative should be authorised by the competent authority.

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 activities/technologies (footprints):	as	well	as	alternative
	Alternative:	Size	e of th	e ac	tivity:
	Alternative A1 (preferred activity alternative)				19.8ha.
	Alternative A2 (if any) Alternative A3 (if any)				
or	r, for <b>linear activities</b> : N/A				
		Len	igth o	the	activity:
	Alternative A1 (preferred activity alternative)				
	Alternative A1 (preferred estivity alternative)				
	Alternative A1 (preferred activity alternative) Alternative A2 (if any)				
	Alternative A2 (if any)				
	Alternative A4 (if any)				
b)	·		-		activity:
	Alternative A1 (preferred activity alternative)				m <sup>2</sup>
	Alternative A1 (if any)				
	Alternative A2 (if any)				
	Alternative A4 (if any)				
	Alternative A4 (if any)				
4)	SITE ACCESS				
	Does ready access to the site exist?  f NO, what is the distance over which a new access road will be built	١	/ES		NO
	•				



Describe the type of access road planned:

Access from the proposed site to the N14 National Road exists.

Include the position of the access road on the site plan and required map, as well as an indication of the road about 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 coordinates (Indicate the position of the activity using the latitude and longitude of the
  centre point of the site for each alternative site. The coordinates 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):

<ul> <li>Is the activity permitted in terms of the property's existing land use rights?</li> </ul>	YES	Ю	Please explain
The proposed site is zoned Agriculture and the agricultural fields thereon.	propo	sed development entails	establishing
Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
The proposed site is zoned Agriculture and the agricultural fields thereon.	propo	sed development entails	establishing
(b) Urban edge / Edge of Built environment for the area	YES	<del>O/</del>	Please explain
The proposed site is zoned Agriculture and the proposed development entails establishing agricultural fields thereon.			
(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	<del>NO</del>	Please explain

The proposed site is zoned Agriculture and the proposed development entails establishing agricultural fields thereon. In addition, the proposed site is bordered by agricultural fields and agro-industries.

The proposed development will create employment opportunities (as advocated for in the IDP of the ZF Mgcawu District Municipality) that will be of significant economic and social benefit in the local area, while the negative anticipated terrestrial and freshwater ecological impacts as well as heritage-related impacts will remain low in significance when the EMPr and the recommendations contained in the specialist reports are implemented.



(1) 4 1 2 1 2 1	I		
(d) Approved Structure Plan of the Municipality	YES	<del>NO</del>	Please explain
The proposed site is zoned Agriculture and agricultural fields thereon.	the pro	oposed development enta	ails establishing
(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
No EMF is known to exist for the area.	T		
(f) Any other Plans (e.g. Guide Plan)	YES	NO.	Please explain
The proposed site is zoned Agriculture and agricultural fields thereon.	the pro	oposed development enta	ails establishing
• 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
The proposed site is zoned Agriculture and the proposed development entails establishing agricultural fields thereon. In addition, the proposed development will create employment opportunities (as advocated for in the IDP of the ZF Mgcawu District Municipality) that will be of significant economic and social benefit in the local area, while the negative anticipated terrestrial			
ecology, freshwater ecology as well as heritage-related impacts will remain low in significance when the EMPr and specialist recommendations contained in the specialist reports are implemented.			
Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategy as well as the local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
The proposed site is zoned Agriculture and the proposed development entails establishing agricultural fields thereon. In addition, the proposed development will create much needed employment opportunities (as is advocated for in the IDP of the ZF Mgcawu District Municipality) that will be of significant economic and social benefit in the local area, while the likely negative ecological impacts and heritage-related impacts will remain low in significance when the EMPr and specialist recommendations contained in the specialist reports are implemented.			
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	YES	NO	Please explain
this regard must be attached to the final Basic Assessment Report as Appendix I.)  Access from the proposed site to the N14 Nation			



• 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 final Basic Assessment Report as Appendix I.)

The applicant is not a municipality and so the proposed development is not included in the infrastructure planning of the municipality.

The !Kai Garib Local Municipality has been requested to comment on the availability of unallocated capacity to provide services to the proposed development in addition to commenting on the other aspects of the proposed development.

Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
N/A			
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

The proposed site is zoned Agriculture and the proposed development entails establishing agricultural fields thereon. In addition, the proposed development is located just outside of the urban area of Kakamas and is bordered by other agricultural fields and agri-industries. The proposed site is therefore well suited for the proposed development.

Furthermore, access from the proposed site to the nearby N14 National Road exists.

•	Is the development the best practicable	YES	NO.	Please explain
	environmental option for this land/site?	120	110	i icase explain

The proposed site is bordered by existing ploughed and irrigated agricultural fields as well as agriindustries. The proposed site will therefore blend in well in the area.

The potential impact on terrestrial biodiversity owing to the proposed agricultural fields being established is of low significance as confirmed in the Terrestrial Biodiversity Compliance Statement attached hereto as Appendix D1. The potential impact on freshwater ecology is low as confirmed in the freshwater specialist report attached hereto as Appendix D2. The potential impact on cultural/historical and paleontological aspects as a result of establishing the proposed agricultural fields is low as is indicated in Heritage Impact Assessment attached hereto as Appendix D3. The potential visual impact and loss of a sense of place is also of low significance, as the proposed agricultural fields are bordered by existing ploughed and irrigated agricultural fields as well as agri-industires.

In light of the low ecological impacts expected when the proposed agricultural fields are established and the significant social and economic benefits that will spread through the economy of the town of Kakamas in the form of short-term and long-term employment opportunities, the establishment of the proposed agricultural fields of approximately 19.8ha on Erf 1181, Kakamas is deemed the Best Practicable Environmental Option.



Will the benefits of the proposed land use/development outweigh the negative		NO.	Please explain
use/development outweigh the negative	120	NO	i icasc explain
impacts?			

The potential negative impact of establishing the proposed agricultural fields on biodiversity is of low significance, as confirmed in the Terrestrial Biodiversity Compliance Statement attached hereto as Appendix D1. The potential negative impact of establishing the proposed agricultural fields on freshwater resources is medium to low (Appendix D2, refers). The potential impact on cultural/historical and paleontological aspects is low (Appendix D3, refers). The proposed site is next to existing agricultural fields that are ploughed and irrigated and so the potential visual impact and loss of a sense of place as a result of establishing the proposed agricultural fields on the proposed site also of low significance.

In light of the low negative environmental impacts that society is likely to face as a result of the proposed establishment of agricultural fields and associated infrastructure on the proposed site and the significant benefits that society will enjoy, it is clear that the societal benefits that will result from the proposed agricultural fields far outweigh the potential negative impacts.

Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?		NO	Please explain
---	--	----	----------------

It is highly unlikely that the granting of an environmental authorisation for the proposed establishment of agricultural fields and associated infrastructure on the proposed site will set any kind bad precedent in the local municipal area, as it is clear that the potential negative environmental impacts of the proposed agricultural fields are low and the potential economic and social impacts are significant.

•	Will any person's rights be negatively	Yes	NO	Please explain
	affected by the proposed activity/ies?	100	110	i icase explain

The potential impact of establishing the proposed agricultural fields on terrestrial biodiversity is of low significance, as is confirmed in the Terrestrial Biodiversity Compliance Statement attached hereto as Appendix D1. The potential impact of establishing the proposed agricultural fields on freshwater ecology is low as confirmed in the freshwater specialist report attached hereto as Appendix D2. The potential negative impact on cultural/ historical and paleontological aspects is low as indicated in the Heritage Impact Assessment (Appendix D3, refers). The proposed site is next to existing ploughed and irrigated agricultural fields as well as agri-industries so the potential visual impact and loss of a sense of place as a result of the proposed development is of low.

In light of the medium to low negative environmental impacts that society is likely to face as a result of the establishment of the proposed agricultural fields and associated infrastructure and the significant social and economic benefits that will be realised when the proposed agricultural fields provide short-term employment opportunities during the construction phase and long-term employment opportunities during the operational phase, it is clear that the benefits that will result from the proposed development far outweigh the potential negative impacts.

A public participation process that meets the minimum legal requirements is being followed and should anybody express a concern that their legal rights stand to be violated, the concern raised will be dealt with appropriately.

•	Will the proposed activity/ies compromise the			
	"urban edge" as defined by the local	YES	NO	Please explain
	municipality?			

The proposed agricultural fields and associated infrastructure are to be located next to existing agricultural fields and agri-industries outside of the urban area of Kakamas.



•	Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain		
•	What will the benefits be to society in general and the local communities?  Please explain					

The proposed agricultural fields and associated infrastructure on Erf 1181, Kakamas will provide short-term employment during the development phase and long-term employment during the operational phase and this is highly needed in the administrative area of the ZF Mgcawu District Municipality with its rising unemployment rate.

The employment opportunities to be provided by the proposed development will enable the employees at the proposed development to rise to a position where they are better able to economically sustain themselves and their families. Furthermore, the economic benefits will extend to the economy of the local area when the money earned by the employees at the proposed development is spent on businesses in the surrounding local area.

<ul> <li>Any other need and desirability considerations related to the proposed activity?</li> </ul>	Please explain
N/A	
How does the project fit into the National Development Plan for 2030?	Please explain

The proposed establishment of agricultural fields and associated infrastructure on Erf 1181, Kakamas will provide short-term and long-term employment opportunities, thereby helping to alleviate the rising unemployment situation in the administrative area of the ZF Mgcawu District Municipality. The proposed development is also aimed at providing as much employment as possible to Previously Disadvantaged Persons and this will contribute towards combating poverty reducing the socio-economic inequalities that prevailed in the past.

This is in line with the National Development Plan for 2030<sup>1</sup> in that the National Development Plan is intended to *inter alia*, ".....Reduce inequality, from 0.69 to 0.6....".

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

The general objectives of Integrated Environmental Management, namely, to promote sustainable development through the integration of social, economic and ecological considerations as well as the maintenance of inter- and intra-generational equity have been taken into account through the following:

- The actual and potential impacts of the proposed activity on the environment, socio-economic conditions, and cultural heritage, relative to the proposed site have been identified and evaluated. The proposed mitigation measures, with a view to minimizing negative impacts on the environment, socio-economic conditions, and any cultural heritage, while maximizing benefits and promoting compliance with the principles of environmental management, were assessed.
- The potential environmental impacts of the establishing the proposed agricultural fields and associated infrastructure on Erf 1181, Kakamas have been identified, assessed, and measures proposed to avoid or minimise the negative impacts.
- A public participation process that meets the minimum legal requirements has been followed for the Basic Assessment application to help ensure that the decision-making process takes into account the comments of members of the public and commenting authorities.
- The environmental features of the proposed site have been considered and evaluated in the management and decision-making of the activity. An EMPr has been compiled (Appendix G,

1

<sup>&</sup>lt;sup>1</sup>National Development Plan, 2030. Accessed at <a href="https://www.gov.za/sites/default/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf">https://www.gov.za/sites/default/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf</a>



refers) for the proposed establishment of agricultural fields and associated infrastructure and in the EMPr, the potential impacts with impact avoidance and mitigation measures to be adhered to during the implementation phase are specified.

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

The principles of environmental management, as per Section 2 of the NEMA have been taken into account. The principles include:

Socio-economic development: People and their needs have been placed at the forefront while serving their physical, psychological, developmental, cultural, and social interests – the proposed activity is unlikely to cause an overall negative effect on people. The proposed establishment of agricultural fields and associated infrastructure on Erf 1181, Kakamas will provide short-term and long-term employment opportunities, thereby helping to alleviate the problem of poverty that is caused by unemployment in the administrative area of the ZF Mgcawu District Municipality. The proposed development is also aimed at providing as much employment as possible to Previously Disadvantaged Persons, thereby contributing towards combating poverty and helping to reduce the socio-economic inequalities that prevailed in the past.

- Sustainable development: Development must be socially, ecologically and economically sustainable. The potential negative environmental impacts associated with the proposed establishment of agricultural fields and associated infrastructure are of Medium to Low significance as indicated by the terrestrial biodiversity specialist in the specialist report attached hereto as Appendix D1, freshwater specialist report attached hereto as Appendix D2 and the heritage impact specialist in the report attached hereto as Appendix D3. The recommendations contained in the specialist reports are included in the EMPr and will be implemented to help ensure that the negative potential impacts identified in the said reports are avoided or minimised. The potential impacts of the proposed establishment of agricultural fields will be minimised further through the implementation of the impact avoidance and mitigation measures contained in the EMPr (Appendix G, refers). In this way, the benefits associated with establishing the proposed agricultural fields and associated infrastructure that have been detailed in this Draft BAR will be kept outweighing the potential negative impacts.
- Transparent Public Participation Process: The public participation process followed has given I&APs an opportunity to view and provide comment on the Draft BAR before the BAR is finalised and submitted. The decision of the competent authority will be forwarded to all I&APs so that whomsoever wishes to appeal the decision may appeal.

# 11) 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

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

Title of legislation,	Applicability to the project	Administering	Date
policy or guideline		authority	
The National	Applications for environmental authorisation must	Northern Cape	This
Environmental	comply with the requirements specified in the NEMA	Provincial	application
Management Act,	and in the EIA Regulations of 2014 (as amended)	Department of	
1998 (Act No.		Agriculture,	
107 of 1998)		Environmental	
("NEMA") and the		Affairs, Rural	
Environmental		Development	
Impact		and Land	
Assessment		Reform	
("EIA")			



Regulations of 2014 (as amended)			
Integrated Environmental Management Information Series	Criteria to be used for evaluating the environmental impacts of the proposed activity during the NEMA EIA application process (a copy of the Integrated Environmental Management Information Series can be accessed at <a href="https://www.environment.gov.za/documents/strategies/integrated">https://www.environment.gov.za/documents/strategies/integrated</a> environmentalmanagement eim ).	Northern Cape Provincial Department of Agriculture, Environmental Affairs, Rural Development and Land Reform	This application
Kai !Garib Local Municipality and ZF Mgcawu District Municipality	Municipal by-laws to be adhered to during the construction and operational phase.	Local and District Municipalities	Subsequent to any EA being granted for this application

# 12) WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

# a) Solid waste management

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

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

YES	NO
	200m <sup>3</sup>

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

The waste will be transported by truck to a licensed municipal waste disposal facility and discarded.

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

The licensed municipal solid waste disposal facility that the municipality decides on.

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)?

YES	NO
	30m <sup>3</sup>

The wastewater from the toilets will be piped to a municipal wastewater treatment works for treatment, whereas vegetal waste will be transported to a licensed municipal solid waste disposal facility and discarded there.

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

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 at 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? 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.



NO

YES

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. b) Liquid effluent Will the activity produce effluent, other than normal sewage, that will be disposed YES NO of in a municipal sewage system? If YES, what estimated quantity will be produced per month?  $m^3$ Will the activity produce an effluent that will be treated and/or disposed of on-site? YES NO If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. Will the activity produce effluent that will be treated and/or disposed of at another YES NO facility? 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 wastewater, if any: N/A **Emissions into the atmosphere** Will the activity release emissions into the atmosphere other than exhaust emissions YES NO and dust associated with construction phase activities? 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: d) Waste permit Will any aspect of the activity produce waste that will require a waste permit in terms YES NO of the NEM: WA?

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

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

competent authority - N/A



## e) Generation of noise

Will the activity generate noise?

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

YES	OA
YES	NO

Describe the noise in terms of type and level:

Normal noise generated on farms by tractors and other farm machinery is likely and will be limited to regular daytime working hours as is explained in the EMPr.

# 13) WATER USE

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

Municipal	Waterboard	Groundwater	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?

YES NO

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:

The proposed development includes solar panels for meeting part of its electricity supply needs.

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

The proposed development includes solar panels for meeting part of its electricity supply needs.



# SECTION B: SITE/AREA/PROPERTY DESCRIPTION

# Important notes:

• 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.a. A).	
Occidend Copy No.	(o.g. / t).	

- Paragraphs 1 6 below must be completed for each alternative.
  - Has a specialist been consulted to assist with the completion of this section?

    YES NO

    If YES, please complete the form titled "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.

	Province		Northern Cape		
	District Munic	ipality	ZF Mgcawu District Municipality		
Property	Local Municip	ality	Kai !Garib Local Municipality		
description/physical	Ward Number	(s)			
address:	Erf number Erf 1181, Kakamas				
	C03600060000118100000				
	SG Code				
			properties are involved (e.g. linear activities), please he same information as indicated above.	attach a	full list to
Current land-use zonin municipality IDP/recor		Agricult	ure		
		a list of cu	ses where there is more than one current land-use zourrent land use zonings that also indicate which portion application.	<b>5</b> . ,	
Is a change of land-use	or a consent use	application	n required?	YES	NO

# 1) GRADIENT OF THE SITE

Indicate the general gradient of the site.

# Alternative S1 (Preferred):

Aitemative	(i iciciica).					
Flat	<del>1:50 - 1:20</del>	<del>1:20 – 1:15</del>	<del>1:15 – 1:10</del>	<del>1:10 – 1:7,5</del>	<del>1:7,5 – 1:5</del>	Steeper than
	Average Average					<del>1:5</del>
Alternative S2	? (if any):					
Flat	<del>1:50 – 1:20</del>	<del>1:20 – 1:15</del>	<del>1:15 – 1:10</del>	<del>1:10 – 1:7,5</del>	<del>1:7,5 – 1:5</del>	Steeper than
	Average					<del>1:5</del>
Alternative S3	(if any):					
Flat	<del>1:50 – 1:20</del>	<del>1:20 – 1:15</del>	<del>1:15 – 1:10</del>	<del>1:10 – 1:7,5</del>	<del>1:7,5 – 1:5</del>	Steeper than
	<del>Average</del>					<del>1:5</del>



# 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	
2.2 Plateau	2.5 Open valley	٧	2.8 Dune	
2.3 Side slope of hill/mountain	2.6 Plain	٧	2.9 Seafront	
2.10 At sea				

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

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

	Alterna	tive A1		Alterna	tive A2	Alterna	tive A3	Alterna	ative A4
Shallow water table (less than 1.5m deep)	YES	NO		YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO		YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO		YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO		YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO		YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO		YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO		YES	NO	YES	NO	YES	NO
An area sensitive to erosion	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 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 GeoScience 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	Natural veld with scattered aliens	Natural veld with a heavy alien infestation	Veld dominated by alien species	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

Please see Appendix B for Site Photographs and further descriptions of site vegetation.



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.

N/A

# 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 the boxes marked YES or UNSURE is ticked, please describe the relevant watercourse.

# 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 a 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 # *
Medium-density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant A	Nature conservation area
Medium industrial AN	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line	Museum
Power station	Major road (4 lanes or more) <sup>N</sup>	Historical building
Office/consulting room	Airport	Protected Area
Military or police base/station/compound	Harbour	Cemetery
Spoil heap or slimes dam <sup>A</sup>	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (indigenous vegetation) –

If any of the boxes marked with an "N" are ticked, how this impact will / 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
A core area of a protected area?	YES	NO
A buffer area of a protected area?	YES	NO
The planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
A 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	YES	NO
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:		ertain

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:

N/A

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If YES, please provide proof that the 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.

# **Economic profile of ZF Mgcawu District municipality**

The main sectors (and occupations) contributing to the GDP of the ZF Mgcawu District Municipality are agriculture, forestry, and fishing (see Figure 8 below). Agriculture-based occupations are generally in the form of seasonal manual labour on farms and are concentrated in areas along the Orange River. The lowest sector contributing to the ZFM DM's GDP, was mining and electricity production. The proposed site is located near the Orange River and associated activities presenting employment opportunities may include, but are not limited to, agricultural, construction, and recreational employment opportunities.



# b) Socio-economic value of the activity

What is the expected annual turnover to be generated by or as a result of the project?	R1 750 000
New skilled employment opportunities created in the construction phase of the	2 X Supervisor
project	1 X Irrigation Manager
New skilled employment opportunities created in the <u>operational</u> phase of the project	30
New unskilled employment opportunities created in the <u>construction</u> phase of the project	10
New unskilled employment opportunities created in the <u>operational</u> phase of the project	45
What is the expected value of the employment opportunities during the operational and construction phase?	109 814.40 per year



# 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 <a href="http://bgis.sanbi.org">http://bgis.sanbi.org</a> or <a href="mailto:BGIShelp@sanbi.org">BGIShelp@sanbi.org</a>. 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)

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)	The proposed site is located in close proximity to the Orange River and that is likely why the proposed site falls within a CBA.

b) Indicate and describe the habitat condition on site (will be described once assessments have been received)

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into the condition, e.g. poor land management practices, presence of quarries, grazing, harvesting regimes etc).
Natural		
Near Natural (includes areas with low to moderate levels of alien invasive plants)		
Degraded (includes areas heavily invaded by alien plants)	65%	The vegetation on parts of the proposed site is in a relatively good condition. However, old building foundations, evidence of previous ploughing and evidence of on-site dumping have degraded the habitat. Please see the Biodiversity Compliance Statement attached hereto as Appendix D1
Transformed (includes cultivation, dams, urban, plantation, roads, etc)		



- 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	Endangered	depressions, channelled and						
National	<del>Vulnerable</del>	unchanneled wetlands, flats, Es		Estu	<del>uary</del>	Coas	tline	
Environmental		seeps pans, and artificial						
Management:	Least	wetlands)						
Biodiversity Act (Act	Threatened	YES	NO	UNSURE	YES	NO	YES	NO
No. 10 of 2004)		1.20	110	CINODINE	0	1,0		110

d) Please describe 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)

#### **Vegetation**

The vegetation on the proposed site is identified as Bushmanland Arid Grassland Vegetation. This vegetation type is categorised as Least Threatened. Please refer to the Biodiversity Compliance Statement attached hereto as Appendix D1

#### **Aquatic ecosystems**

A large drainage line traverses the proposed site, with small tributaries of the large drainage line criss-crossing the proposed site.



# **SECTION C: PUBLIC PARTICIPATION**

# 1) ADVERTISEMENT AND NOTICES

Publication name	Gemsbok
Date published	08 July 2024
Location of notices	
Proposed site	
At the offices of the Kai! Garib Local Municipality	
	_
Date placed: 08 July 2024	

Include proof of the placement of the relevant advertisements and notices (Refer to 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 No. R. 733.

# PPP (Refer to Appendix E)

- An advertisement was placed in a local newspaper, *i.e.*, Gemsbok, which was published on 08 July 2023. Refer to Appendix E1.
- Adjacent landowners/ occupiers were notified via letter drops on 08 July 2024.
- An initial register of possible interested and affected parties was compiled (Refer to Appendix E)
- A site visit was conducted on 08 July 2024 to familiarise with the proposed site and nearby surrounding area and identify environmental sensitivities associated with the proposed site.
- A Comments and Responses Report (C&R Report) has been compiled to address comments received during the initial stage of public participation (Refer to Appendix E).
- Subsequent to the pre-application process, an application form was compiled and submitted to the competent authority and a Draft BAR was made available to the competent authority and I&APs for a commenting period of 30 days.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (Tel. number or e-mail address)

Include proof that the key stakeholder received written notification of the proposed activities (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 with the competent authority.



# 3) ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES (Please See Appendix E)

Summary of main issues raised by I&APs	Summary of response from EAP
None	N/A

# 4) COMMENTS AND RESPONSES REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the 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 BAR as Appendix E3.

Please refer to Appendix E3 for the comments and response report.

# 5) AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Please refer to Appendix E					

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 before the commencement of the public participation process.

A list of registered I&APs must be included in 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.

# Please see Appendix F for Impact Assessment and Scoring Matrix.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (p	referred alternative)		
Geographic and physical	Direct impacts: Indirect impacts:	Low negative Low negative	<ul><li>Implement EMPr;</li><li>Minimise development footprint;</li><li>ECO monitoring;</li><li>Waste management.</li></ul>
Biological:	Cumulative impacts: After mitigation Direct impacts:	Low negative Medium-low	Limit construction work to normal working hours     All construction must be done in accordance
(vegetation, protected species,	Indirect impacts:	negative with an approved constru	
CBAs,)	Cumulative impacts: After mitigation	Low negative	<ul> <li>Management Plan (EMP), which must be developed by a suitably experienced Environmental Assessment Practitioner.</li> <li>A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies.</li> <li>Before any work is done the footprint must be clearly demarcated. The demarcation must aim at minimising the impact on SoCC and minimising disturbance to watercourses – wherever possible (taking the recommendations from the freshwater specialist into account).</li> <li>The "Search &amp; Rescue" recommendations</li> </ul>



Activity Impact summary Signific	ance Proposed mitigation
Alternative 1 (preferred alternative)	given in Error! Reference source not found. m ust be implemented:  • An effort should be made to replant at least 50% of the Aloe species within the footprint area, to adjacent land, outside off the footprint area.  • Euphorbia spinea individuals encountered within the footprint area should be replanted outside the footprint area.  • Search & Rescue must include an aftercare period, during which the plants are watered from time to time to give them the best possible chance of survival.  • All efforts must be made to protect (or incorporate) the Vachellia erioloba (Camelthorn) trees when planning the final layout of the infrastructure. A protection zone of at least 2m should surround the canopy of these trees (in an effort to protect the root systems of these
	<ul> <li>trees);</li> <li>All alien invasive species within the footprint and or within 10 m of the footprint must be removed responsibly.</li> <li>Care must be taken with the eradication method to ensure that the removal does not impact or lead to additional impacts (e.g., spreading of the AIP due to incorrect eradication methods);</li> <li>Care must be taken to dispose of alien plant material responsibly.</li> <li>Indiscriminate clearing of any area outside of these footprints may not be allowed.</li> <li>An integrated waste management approach must be implemented during construction.</li> <li>Construction related general and hazardous waste may only be disposed of at approved waste disposal sites.</li> </ul>



Activity	Impact summary	Significance	Proposed mitigation		
Alternative 1 (p	preferred alternative)	)			
			All rubble and rubbish should be collected and removed from the site to a Municipal approved waste disposal site.		
Sewage Management	Direct impacts:	Low negative	- A portable toilet must be provided for every 15 construction workers during the construction		
Ü	Indirect impacts:	Low negative	phase and the sewage collected and disposed o at a licensed wastewater treatment works at leas		
	Cumulative impacts: After mitigation	Low negative	twice a week.		
Freshwater	Direct impacts:	N/A	- Construction must be completed during the dry season to help limit the amount of		
	Indirect impacts:	N/A	sediment that may wash into the on-site drainage lines and eventually into the Orange River.  - The Applicant must install technology for		
	Cumulative impacts:	N/A	measuring soil moisture content to help prevent over-irrigation and its associated risk of agricultural return flows that can pollute drainage lines and the Orange River.		
Socio- economic	Direct impacts:	Medium positive	-No mitigation is required.		
	Indirect impacts:	Medium positive			
	Cumulative impacts: After mitigation	Medium positive			
Cultural- Historical	Direct impacts:	Medium			
	Indirect impacts: Cumulative	Low	Implement EMPr		
	impacts: After mitigation	Low			
Noise impact	Direct impacts:	Low	Any noise from the proposed establishment of agricultural fields that exceeds the current levels of		
	Indirect impacts:	N/A	noise in the area will be a temporary impact of the		
	Cumulative impacts:	N/A	construction phase and the noise of the operational phase should revert to levels comparable to the current noise levels. The following mitigation measures will be implemented:  - A complaints register will be maintained onsite. Any complaints received will be responded to and rectified accordingly. The ECO must be notified of any complaints		



Impact summary	Significance	Proposed mitigation	
Alternative 1 (preferred alternative)			
		- Working hours must be strictly limited to regular daytime working hours (08h00-17h00)	
Direct impacts:	Low		
Indirect impacts:	Low	N/A	
Cumulative impacts: After mitigation	Low		
Direct impacts:	High negative	- The no-go alternative entails maintaining the status quo. This means that in spite of the low	
Indirect impacts:	High negative	negative ecological impacts that are likely from the	
Cumulative impacts: After mitigation	High negative	proposed development and the significant sociand economic impacts that are likely from the proposed development, the landowner would left 1181, Kakamas remain as a disused parcel land and the social and economic benefits that a expected to result from implementing the proposed development will not materialise.  In light of the major need to create employme opportunities in the ZF Mgcawu District Municip Area as is stated in the IDP of the municipality adopting the 'no-go' alternative would be high	
	Direct impacts:  Indirect impacts:  Cumulative impacts: After mitigation  Direct impacts: Indirect impacts: Cumulative impacts:	Direct impacts:  Indirect impacts:  Low  Cumulative impacts: After mitigation  Low  High negative  Indirect impacts: High negative  Cumulative impacts: After mitigation	

A complete impact assessment in terms of Regulation 19(3) of GN 733 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 occurring and the significance of impacts.

Please refer to Appendix F for the full Impact Assessment and proposed Mitigation Measures.

#### Proposed establishment of agricultural fields on Erf 1181, Kakamas

A major need to create employment opportunities in the administrative area of the ZF Mgcawu District Municipality exists as is stated in the IDP of the municipality as a result of the rapidly growing population size.

The proposed establishment of agricultural fields on Erf 1181, Kakamas will provide short-term employment during the development phase and long-term employment during the operational phase.

The employment opportunities to be provided by the proposed development will enable the employees at the proposed development to rise to a position where they are better able to economically sustain themselves and their families. Furthermore, the economic benefits will extend to the economy of the local area when the money earned by the employees of the proposed



development is spent at businesses in the surrounding local area. The potential positive social and economic impacts of the proposed development are therefore quite significant.

The proposed site is bordered by existing active agricultural fields and agri-industries and this highly limits the value of the proposed site as a potential ecological corridor that may link the proposed site to the other indigenous vegetation in the surrounding landscape. The likely ecological impacts of the proposed development are therefore low.

The heritage-related impacts of the proposed development are deemed Low as indicated in Appendix D3.

In view of the above, the likely benefits of the proposed establishment of agricultural fields on Erf 1181, Kakamas far outweigh the potential negative impacts. It is therefore suggested that the competent authority authorise the proposed establishment of agricultural fields on Erf 1181, Kakamas.

In light of the above, it is advisable that the proposed development be authorised by the competent authority.



# SECTION E. RECOMMENDATION OF EAP

Is the information contained in this report and the documentation attached hereto		
sufficient to decide in respect of the activity applied for (in the view of the	YES	NO
environmental assessment practitioner)?		

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 a further assessment).

The Draft BAR was be made available to Interested and Affected Parties for public participation as per the EIA Regulations of 2014 (as amended), before the BAR could be submitted to the competent authority for a decision on the application.

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.

## **Recommended conditions**

- All construction must take place in accordance with an approved construction and operational phase Environmental Management Programme (EMPr.
- A suitably experienced ECO must be appointed to ensure compliance with the conditions of the Environmental Authorization and the EMPr.
- Construction work must be started and completed during the dry season to minimise the washing away of sediment into drainage lines and eventually the orange River.
- All waste material on site must be removed and disposed of at a lawful municipal waste disposal facility.
- The recommendations contained in the Biodiversity Compliance Statement attached hereto as Appendix D1 must be implemented
- The recommendations contained in the Aquatic Biodiversity Assessment attached hereto as Appendix D2 must be implemented
- The recommendations contained in the Heritage Impact Report attached hereto as Appendix D3 must be implemented

Is an EMPr attached?	YES	OM

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 in 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.



Bernard de Witt_ NAME OF EAP	
SIGNATURE OF EAP	 DATE



**SECTION F: APPENDICES** 

The following appendices are attached:

**APPENDIX A: MAPS** 

**APPENDIX B: SITE PHOTOGRAPHS** 

**APPENDIX C: FACILITY ILLUSTRATION** 

**APPENDIX D: SPECIALIST REPORTS** 

**APPENDIX E: PUBLIC PARTICIPATION** 

APPENDIX E1:PROOF OF ADVERTISEMENT AND NOTICES

APPENDIX E2:COMMENTS AND RESPONSES

APPENDIX E3:1&AP REGISTER

APPENDIX F: IMPACT ASSESSMENT AND SCORING MATRIX

APPENDIX G: ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

APPENDIX H: DETAILS OF EAP AND EXPERTISE