

Final Basic Assessment Report

October 2023

**Proposed Vegetation
Removal for a Residential
Development on the Farm
Morgen 542, Nketoana Local
Municipality, Free State
Province.**



GREEN-BOX
CONSULTING

BASIC ASSESSMENT REPORT



destea

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

(For official use only)

File Reference Number:

Application Number:

Date Received:

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

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **13 February 2020**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of “not applicable” in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

BASIC ASSESSMENT REPORT

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

Green Box Consulting is appointed by the applicant, Gert Tack Familietrust, as the Independent Environmental Assessment Practitioner (EAP), to conduct the legally required Basic Assessment (BA) process. The project applicant proposes to formally develop a portion of land for residential purposes, directly adjacent south of the town of Reitz, Free State Province. The proposed development will entail formal construction of approximately 8.69 ha in size, for the proposed residential infrastructure.

The town forms part of the Nketoana Local Municipality which in turn, forms part of the Thabo Mufutsanyane District Municipality. The assessment area falls within the municipal urban edge. Access to the assessment area is obtained by way of Froneman Street, from the north.



Site map (Google Earth, 2023)

The proposed development plans to include the following:

- 7x 3000m² Residential stands
- 7x 1500m² Residential stands
- 10x 1000m² Residential stands
- 10x 800m² Residential stands
- 10x 20 units per hectare Townhouses
- 10x 40 units per hectare Townhouses
- 10x 40 units per hectare Townhouses
- Internal roads and open spaces.

BASIC ASSESSMENT REPORT

Services:

Water supply:

Nketoana Municipality currently pumps out raw water from Liebenbergvlei river to the Reitz Water Treatment Works for purification. Potable water is then pumped to the Reservoir and Gravity-fed to the town of Reitz and Petsana. The Treatment Works also supplies Petrus Steyn via a dedicated pipeline since it falls under Nketoana's jurisdiction.

The proposed development will demand 53.255kl/day.

Sanitation:

On the northern side of the proposed development, there is a wastewater and sewer disposal chamber alongside Froneman Street.

A water-borne sewer disposal system is proposed, and the internal reticulation will use piping with a minimum diameter of 110 mm and appropriate manholes will be installed at a maximum of 80 m as prescribed by the local authority.

Stormwater Management:

Approximately one third of the development's topography (the Northern most part of the site) will slope towards the existing stormwater infrastructure at Viljoen Street while the rest will be directed towards the Natural Channel located along the Southern Boundary of the site using roadside kerbing, piping, grid-inlets, concrete channels and existing retention dam.

Roads:

Morgen 542 currently has 5 (five) access points. One of these points is located along Springbok Avenue/Viljoen Street which runs from the R26 road to the town's Central Business District. The road is currently in a good state (type: skid-resistant surfaced road) and has a width of approximately 7.6 metres. The other 4 accesses are in Froneman Street. The road is a gravel route with a gradual fall towards the development.

Electricity:

The electricity onsite is currently supplied by Nketoana Local Municipality. High-Voltage Overhead Eskom lines and an Electric Box were noted on the Property.

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
Listing 1 activity no. 24 (GN R 327) – <i>The development of a road— (ii) with a reserve wider than 13,5 meters, or where no reserve</i>	The internal road planned will measure 16 meters in width.

<i>exists where the road is wider than 8 metres.</i>	
Listing Notice 1 (GNR No. 327) Activity no. 27: <i>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.</i>	The proposed development will clear approximately 8.69 hectares in size.
Listing Notice 1 (GNR No. 327) Activity no. 28: <i>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.</i>	The proposed development will clear approximately 8.69 hectares in size. The development includes open space, internal roads, town houses, and residential stands.

2. FEASIBLE AND REASONABLE ALTERNATIVES

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

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

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

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

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

BASIC ASSESSMENT REPORT

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>The project applicant proposes to formally develop a portion of land for residential purposes, directly adjacent south of the town of Reitz, Free State Province. The proposed development will entail formal construction of approximately 8.69 ha in size, for the proposed residential infrastructure.</p> <p>The proposed development plans to include the following:</p> <ul style="list-style-type: none"> 7x 3000m² Residential stands 7x 1500m² Residential stands 10x 1000m² Residential stands 10x 800m² Residential stands 10x 20 units per hectare Townhouses 10x 40 units per hectare Townhouses 10x 40 units per hectare Townhouses Internal roads and open spaces. 	27°48'47.95"S	28°25'34.89"E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
None considered.		
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
None considered.		

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

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

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

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

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>The project applicant proposes to formally develop a portion of land for residential purposes, directly adjacent south of the town of Reitz, Free State Province. The proposed development will entail formal construction of approximately 8.69 ha in size, for the proposed residential infrastructure.</p> <p>The proposed development plans to include the following:</p> <ul style="list-style-type: none">  7x 3000m² Residential stands  7x 1500m² Residential stands  10x 1000m² Residential stands  10x 800m² Residential stands  10x 20 units per hectare Townhouses  10x 40 units per hectare Townhouses  10x 40 units per hectare Townhouses  Internal roads and open spaces. 	27°48'47.95"S	28°25'34.89"E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
None considered.		
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
None considered.		

c) Technology alternatives

Alternative 1 (preferred alternative)
The use of greener alternatives is considered for heating and cooling. The use of energy efficient lights within and outside of the development will be promoted.
Alternative 2
None considered.
Alternative 3
None considered.

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

Alternative 1 (preferred alternative)
None considered.
Alternative 2
N/A
Alternative 3
N/A

e) No-go alternative

If the no-go alternative is decided on, no construction will occur on the property and no environmental impacts will occur except for further degradation of the area.
 However, if the no-go alternative is decided on the opportunity will be lost to create temporary jobs and a positive impact on the socio-economic during the construction phase as the proposed project will provide people with indirect jobs and economic gain through providing the applicant with building material and services.

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

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1¹ (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Size of the activity:

±6.59 hectares
m ²
m ²

or, for linear activities:

Alternative:

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

Length of the activity:

m
m
m

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/servitude:

±6.59 hectares
m ²
m ²

4. SITE ACCESS

Does ready access to the site exist?

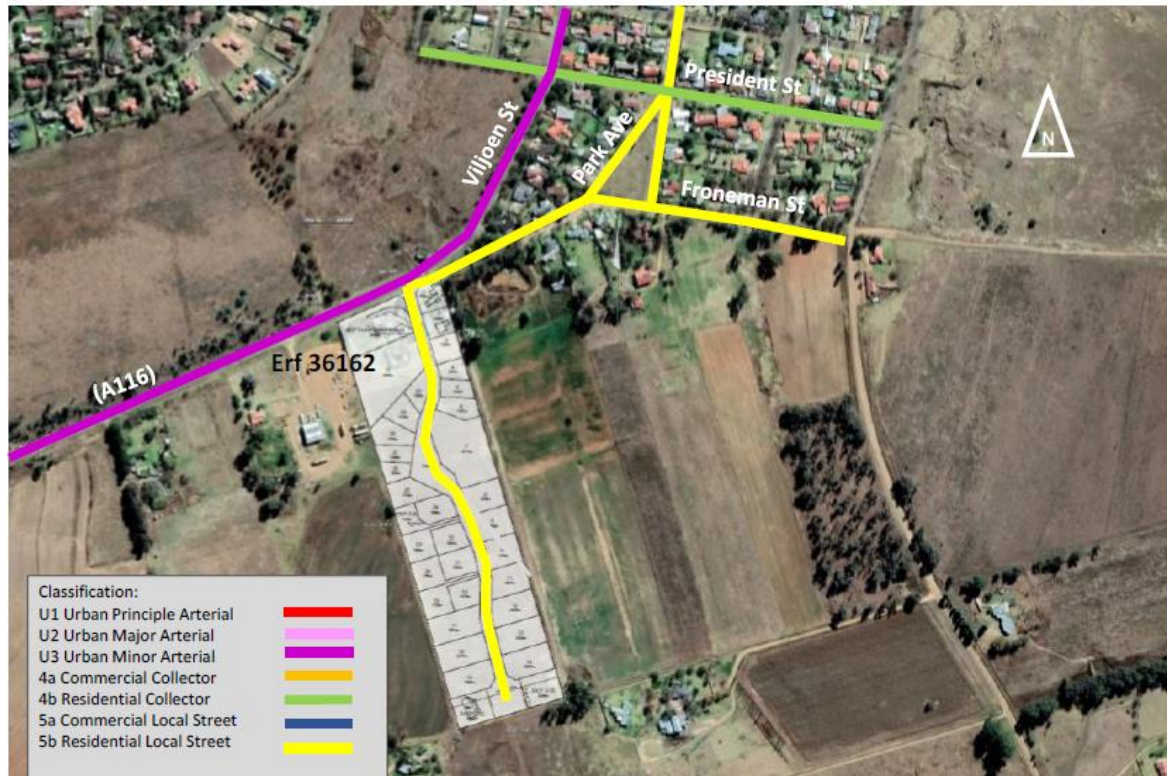
If NO, what is the distance over which a new access road will be built

YES	
-	m

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

Describe the type of access road planned:

An access point off the A116 (see image below) is to be established. This will then feed into an internal road.



Traffic impact assessment (KMA Consulting Engineers, 2023)

Detail of access control is not available at the zoning stage, but it is important that a number of aspects are taken into consideration in the final planning.

- With the location of the access, it should be ensured that the access is constructed as a standard intersection with the new street appearing as a proper street and not a lower order access.
- Considering the road classification, a throat (distance between erf boundary and gates) of at least 10m should be provided.
- Depending on the type of access control, a median of at least 500mm will have to be provided to accommodate access control infrastructure.
- Access lanes should be at least 3m wide, and with a median, 3.2m lanes should be provided.
- Proper provision should also be made for a pedestrian gate.

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

BASIC ASSESSMENT REPORT

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
A SPLUMA application is in process to have the property rezoned.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
The proposed development addresses the following provincial priority areas: "Economic growth, development and employment" "Social and human development". (Free State Spatial Development Framework).			
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
The proposed development falls just outside the urban edge of Reitz.			

BASIC ASSESSMENT REPORT

(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO	Please explain
<p>Section 152 of the Constitution, 1996, stipulates as the core objects of local government the following:</p> <p>1. The objects of local government are –</p> <p>a. to provide democratic and accountable government for local communities;</p> <p>b. to ensure the provision of services to communities in a sustainable manner;</p> <p>c. to promote social and economic development;</p> <p>d. to promote a safe and healthy environment; and</p> <p>e. to encourage the involvement of communities and community organizations in the matters of local government.</p> <p>2. A municipality must strive, within its financial and administrative capacity, to achieve the objects set out in subsection (1).</p> <p>The Nketoana Local Municipality places these objects at the core of all its operations, programmes and projects, and has therefore, in compliance with the National Government’s vision for local government.</p> <p>The proposed development will contribute to promoting social and economic development.</p>			
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
The municipality states that “The Municipality has managed to increase access to housing, but the backlog stays a challenge.” (IDP, 2021). Thus, the proposed development will address this.			
(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 adopted.			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
None applicable.			

BASIC ASSESSMENT REPORT

<p>3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?</p>	YES	NO	Please explain
<p>The municipal IDP states the local housing backlog as a priority.</p>			
<p>4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	YES	NO	Please explain
<p>The municipal IDP states the local housing backlog as a priority.</p>			
<p>5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>The municipal services are of adequate capacity – to be confirmed in a letter from the local municipality.</p>			
<p>6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>The municipal IDP states the local housing backlog as a priority.</p>			
<p>7. Is this project part of a national programme to address an issue of national concern or importance?</p>	YES	NO	Please explain
<p>The project is too small to contribute. However, the creation of job opportunities will contribute to the reduction in unemployment rates and boost the local economy.</p>			
<p>8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)</p>	YES	NO	Please explain
<p>Yes, the site is in a good position to cater for the population of Reitz. It will promote access to residency and services, as well as employment opportunities for locals. Local economic growth will be stimulated and will be done by direct capital investment in buildings and infrastructure. Many jobs will be created during the construction phases as well as the operational phases.</p>			

BASIC ASSESSMENT REPORT

9. Is the development the best practicable environmental option for this land/site?	YES	NO	Please explain
Yes. The site is currently not being used and provides an ideal location for the proposed development.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain
Yes. The use of this land for the proposed development will result in job opportunities, access to residency and services, and ultimately community upliftment. No environmental fatal flaws have yet been identified.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
The proposed development is remote and the local community small, therefore it will not set a precedent.			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
It is not foreseen that any person's rights will be directly negatively affected by the proposed development.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
The development will take place on the outside of the urban edge, and will not compromise the urban edge.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
No, the project is not on a large enough scale and will make a local impact.			
15. What will the benefits be to society in general and to the local communities?	Please explain		
Local economic growth will be stimulated and will be done by direct capital investment in buildings and infrastructure. Many jobs will be created during the construction phases as well as the operational phases.			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
There are no additional considerations related to the proposed activity.			

17. How does the project fit into the National Development Plan for 2030?	Please explain
<p>One of the main approaches of the 2030 Development Plan, is an approach to change, by enhancing capabilities and active citizenry. Economic facilities, work, consumption, exchange, investment and production are key capabilities to consider for development.</p> <p>The proposed development considered in this application will contribute to job creation. This opportunity to enhance economic capabilities will therefore contribute to assist in creating change towards a better local economy for the local municipal area. The high rate of unemployment within the Municipality will be consequentially reduced.</p>	
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.	
<p>According to Section 23 of NEMA, 1998, the following should be considered:</p> <p>EIA process for listed activities should be followed An application for environmental authorisation was submitted to DESTEA. Baseline assessment was undertaken. Compilation of a Draft Basic Assessment Report which includes the potential impacts identified during the assessments. Submission of draft reports to the respective competent authorities for perusal.</p> <p>Compilation of an EMPr An EMPr containing management measures to be implemented to limit environmental impacts are attached hereto.</p> <p>All possible interested and / or affected parties were notified of the proposed project by means of letters, advertisement, and site notices.</p> <p>I&APs are given the opportunity to register and comment on the Draft BAR.</p> <p>Need in terms of socio-economic level The need in terms of the socio-economic level was assessed.</p> <p>The proposed expansion development has been adequately considered by a trained and competent Environmental Assessment Practitioner, and all potential impacts that may have a significant impact on the receiving environment have been considered and mitigated to acceptable levels as required by the NEMA 2014 EIA- as amended regulations. The conclusions of the environmental impact assessment have been concisely summarised to adequately inform decision-making by the competent authority. A comprehensive Public Participation Process was also undertaken, which conformed to requirements in Chapter 6 of the Environmental Impact Assessment Regulations. Further all Interested and Affected Parties were given ample time to review and comment on all documents and reports.</p>	

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

An application for environmental authorisation was submitted to DESTEA.

The results obtained from baseline assessments were used to assess the possible impacts (positive and negative) on an environmental as well as social level. The Draft BAR was made available to the relevant sector departments and the public for their respective comments.

Compilation of an EMPr:

An EMPr containing management measures to be implemented on site was compiled by taking the possible impacts that the proposed project may have on the environment, into consideration.

Public participation process undertaken:

Adjacent landowners to the proposed site will be notified of the proposed project by means of formal notices either delivered by hand / e-mail / postage. In addition, site notices were placed, and a notification was published in a local newspaper. The local municipality was also notified of the proposed project. I&APs are given the opportunity to register and comment on the Draft BAR.

Need in terms of socio-economic level:

The proposed project will provide employment opportunities for a number of people from the local community during the construction and operational phases.

The principles of environmental management as set out in Section 2 of NEMA have been taken into account through the following means:

- There will be no loss of endangered or protected biological diversity;
- Pollution will be minimised; and
- This activity will reduce the exploitation of non-renewable resources.

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:

BASIC ASSESSMENT REPORT

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act	Activity proposed is listed in terms of GN R 327; Development must take the principles in NEMA into consideration.	DESTEA	107 of 2010
The Constitution of South Africa	Affected parties have the right to a clean and healthy living environment. Any development proposal might impact on this right.	South Africa	108 of 1996
National Heritage Resources Act	All vacant land may contain historical or archaeological significant elements, worthy of protection.	South African Heritage Resources Agency	25 of 1999
Occupational Health and Safety Act	Regulations applicable both during construction and operation of the proposal.	Department of Labor	1993

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
$\pm 3m^3$	

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 disposed of in bags, drums/bins and skips as required, and disposed of by the contractors as often as necessary and in the appropriate manner.

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

Nearest licensed landfill site located in Reitze and is appropriately licensed.

Will the activity produce solid waste during its operational phase?

YES	NO
$\pm 2-3m^3$	

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

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

Domestic waste will be removed from each housing unit to a centralised location on site. Recycling techniques will be applied as far as possible, at the source and centralised location. From the centralised location it will be taken to the nearest municipal landfill which is in Reitz.

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

Reitz.

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.

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.

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

YES	NO
-----	-----------

 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 of in a municipal sewage system?

YES	NO
-----	-----------

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

m ³	
----------------	--

 Will the activity produce any 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 facility?

YES	NO
-----	-----------

If YES, provide the particulars of the facility:

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

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

--

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES	NO
-----	-----------

 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:

BASIC ASSESSMENT REPORT

In the operational phase no emissions would be anticipated beyond what is normal for any residential type development and therefore not controlled by any sphere of legislation, however, during construction, activities will generate dust and particulate matter. This may be aggravated if drilling and breaking of the hard bedrock layer at the site is required for foundations and infrastructure.

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?

YES	NO
YES	NO

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

Describe the noise in terms of type and level:

No excessive noise beyond that expected from any residential type of development would be anticipated during the operational phase, however, construction activities will generate probably fairly significant levels of noise, particularly if drilling and breaking of hard bedrock foundations is required for foundations and installation of infrastructure. Mitigation measures will be made applicable to contractors which will help reduce the impacts.

Complaints can be expected if the difference between neighbourhood noise levels and the ambient noise levels are more than 10dB. Alternatively, noise levels in excess of 45dB would be a nuisance especially during the night when neighbourhood noise levels are low. Strict working times (8am-5pm) should therefore be enforced.

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, 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:

-	litres
---	--------

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

	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:

No specific measures are proposed; however, each housing unit will be fitted with the latest energy saving features such as energy saving bulbs.

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

Solar systems will be considered in future, however the development will be connected to Eskom infrastructure, as a first phase.

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 Province
District Municipality	Thabo Mofutsanyana District Municipality
Local Municipality	Nketoana Local Municipality
Ward Number(s)	07
Farm name and number	Morgen 542
Portion number	-
SG Code	F02800000000054200000

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:

The property is currently being rezoned through a SPLUMA application – pending the environmental Basic Draft Assessment application approval.

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?

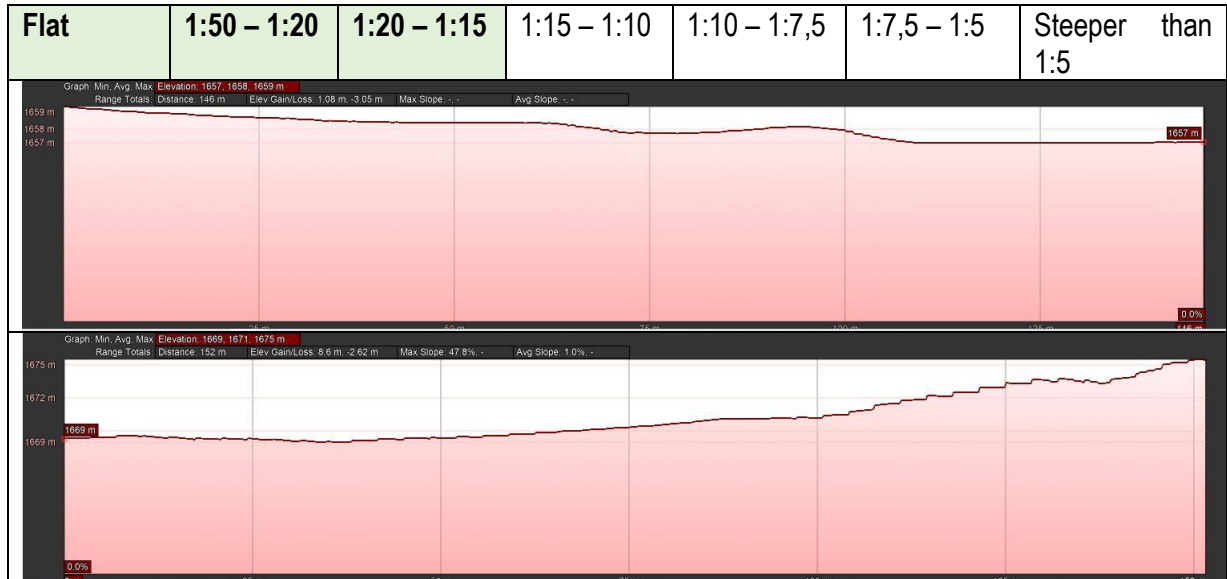
YES	
-----	--

BASIC ASSESSMENT REPORT

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:



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	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input checked="" type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>
2.10 At sea	<input type="checkbox"/>				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO

BASIC ASSESSMENT REPORT

Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	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 Geo Science may also be consulted.

4. GROUND COVER

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 ^E	Natural veld with scattered aliens^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	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 the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

-

BASIC ASSESSMENT REPORT

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:

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 ^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 ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	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:

Not applicable.

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:

Not applicable.

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:

Not applicable.

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:

	NO
--	----

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

Potentially significant Tarkastad Subgroup rocks are buffered by a well-developed and paleontologically insignificant residual overburden that has been severely degraded by previous agricultural and excavation activities. Given the low relief terrain and depth of the modern soil veneer, likelihood for negative impact on potentially in situ Triassic fossils is considered low. The proposed footprint is not considered paleontologically or archaeologically vulnerable and is assigned a site rating of Generally Protected C with a recommendation that planned development can proceed (Paleo Field Services, 2023).

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

	NO
	NO

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.

The Nketoana Municipality is situated within the Thabo Mafutsanyana District Municipality in the Eastern Free State. It comprises of Reitz, Petsana, Petrus Steyn, Mamafubedu, Lindley, Ntha, Arlington and Leretswana. The municipality is 54km from Bethlehem, 240km from Johannesburg and 60 km from the N3 road. The main economic activities in the area are agriculture and retail businesses.

Nketoana Local Municipality is named after the Leibenbergsvlei River, which is Nketoana in Sesotho. The highest population density is found in the Reitz/Petsana area. The municipality accommodates approximately 60 324 people and covers an area of 5 611km².

In terms of enumeration area (EA) types, 74% of the population lives in formal residences. The population size of the Nketoana Local Municipality is estimated at approximately 60 324, that is 8% of the total population of Thabo Mofutsanyana. Nketoana is situated in the north-eastern parts of the Free State within the regional boundaries of the Thabo Mofutsanyane District Municipality. The languages spoken in Nketoana are predominantly Sesotho, Isizulu and Afrikaans.

Level of unemployment:

Within the municipality, there is a 30% unemployment rate. Looking at the youth specifically, aged between 15 years and 34 years, there is a 42% unemployment rate. This level is significantly high and

the development of this project would provide opportunity for both short and long term work opportunity. The short term would be with regard to the construction phase, and long-term referring to the running and maintaining of the residential development.

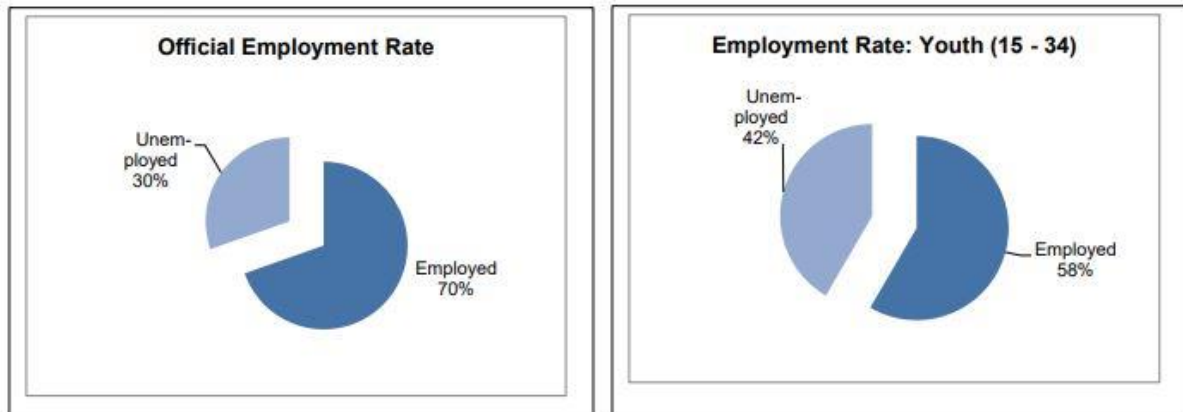


Figure 1. Official employment rate of the Nketoana Municipality (Accessed from: the Nketoana Municipality IDP 2020)

Increased employment opportunity would reduce poverty driven theft and crime, as well as contribute positively towards community upliftment. The new skills and knowledge obtained through these employment opportunities would empower citizens to become competent in a skill and thus also provide greater opportunities finding work in the future.

Economic profile of local municipality:

Appoint significant portion of the population is employed in the financial and business services sector. According to the municipal IDP, promotion of agriculture should be encouraged to diversify the economy. Additionally, the population area is very poor and there are no facilities available for the development and training of skills. The development of the proposed development would positively contribute to the goals of the municipality. The alarmingly high percentage of no income earners within the municipality would potentially have opportunities to earn, which were previously unavailable. The high levels of poverty would be somewhat addressed, and community upliftment would be a resultant outcome of this establishment. The stability provided by the establishment of the proposed project would contribute positively towards a stable local economy and a potentially higher local economy.

Level of education:

The level of education in the municipality finds the majority of citizens with a grade 8 and 0-7 level of education. The third dominant level of education is not applicable or other, implying none. Thereafter, is a matric level education or post higher diplomas. With the majority of citizens having obtained the lowest levels of education, or none, there is an opportunity for knowledge and skill development through the proposed project. The limited levels of education could be due to many factors, ranging from lack of opportunity to living in poverty. To address this, the training and employment of citizens would provide a sense of stability in terms of local economy and person development, thus contributing positively to community upliftment as a whole.

BASIC ASSESSMENT REPORT

	Grade 0 - Grade 7 / Std 5/ ABET 3	Grade 8 / Std 6 / Form 1 - N6 / NTC 6	Certificate with less than Grade 12 / Std 10 - Diploma with less than Grade 12 / Std 10	Certificate with Grade 12 / Std 10 - Post Higher Diploma Masters; Doctoral Diploma	Bachelors Degree - Bachelors Degree and Post graduate Diploma	Honours degree - Higher Degree Masters / PhD	Other - Not applicable
FS193: Nketoana	20994	24279	97	1338	440	222	12954
Ward 1	2253	2704	17	177	48	33	1553
Ward 2	2846	2869	2	91	15	12	1670
Ward 3	3063	2977	6	117	23	21	1719
Ward 4	1969	2377	5	152	57	26	1280
Ward 5	2219	2386	2	98	39	7	1290
Ward 6	2087	2387	30	283	120	62	1543
Ward 7	2105	2722	32	254	113	52	1174
Ward 8	1643	2386	1	115	9	2	978
Ward 9	2810	3472	1	51	16	6	1746

Figure 2. Education level within the Nketoana Municipality (Accessed from: the Nketoana Municipality IDP 2020)

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	To be determined
What is the expected yearly income that will be generated by or as a result of the activity?	To be determined
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?	±20
What is the expected value of the employment opportunities during the development and construction phase?	To be determined
What percentage of this will accrue to previously disadvantaged individuals?	95%
How many permanent new employment opportunities will be created during the operational phase of the activity?	±12
What is the expected current value of the employment opportunities during the first 10 years?	To be determined
What percentage of this will accrue to previously disadvantaged individuals?	95%

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.

BASIC ASSESSMENT 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				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 site is classified as “degraded”.

- 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	10%	There is intact grassland on site.
Near Natural (includes areas with low to moderate level of alien invasive plants)	70%	There is a presence of alien vegetation and trees present on site.
Degraded (includes areas heavily invaded by alien plants)	20%	There is open ground and exposed soil.
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 status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline			
	Endangered									
	Vulnerable									
	Least 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)

Biodiversity and Vegetation

The distribution of the Eastern Free State Clay Grassland consists of the Free State Province and marginally in Lesotho: Low-lying areas of the eastern regions of the province, covering the vicinities of Wepener (south), Petrus Steyn (north), Excelsior and east of Winburg (west) and Warden (east) and a thin extension between Maseru and Fouriesburg, with an altitude of 1 380–1 740 meters above sea level.

The vegetation and landscape features flat to gently rolling land surfaces covered with grassland dominated by *Eragrostis curvula*, *Themeda triandra*, *Cymbopogon pospischilii*, *Eragrostis plana*, *Setaria sphacelata*, *Elionurus muticus* and *Aristida congesta*. Overgrazing in certain areas and selective grazing of the grassland create a patchy appearance, with dominant and diagnostic species associated with small to large patches of a few hectares in diameter. A wide range of grazing regimes on the macro-scale and within grazing units in the area on the micro-scale, create this fragmentation.

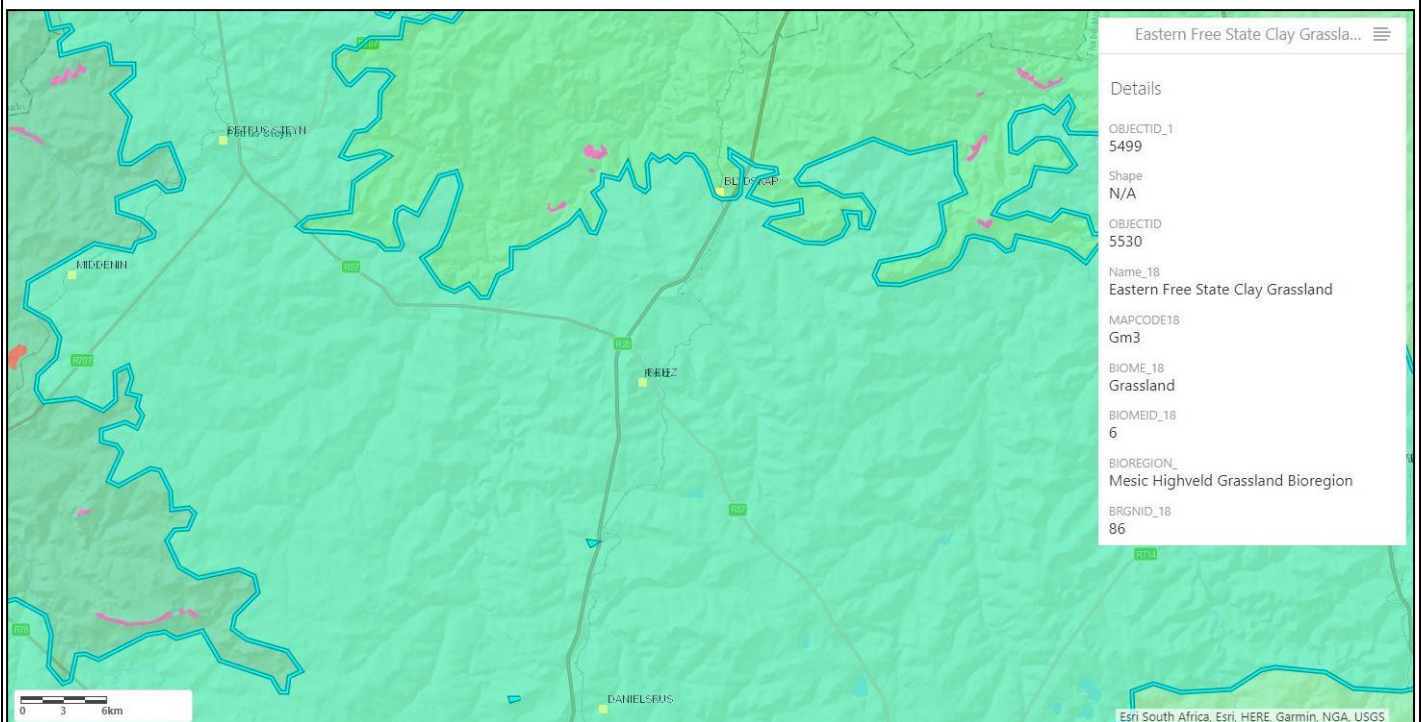


Figure 3. Vegetation classification of the site area – Eastern Free State Clay Grassland (SANBI bgis, 2018)

The area falls within a summer-rainfall region, with the Mean Annual Precipitation (MAP) being around 630 mm. Much of the precipitation falls in form of thunderstorms between November and March. One of the coldest regions of the Highveld. Frost is very frequent in winter.

During the site inspection ground truthing revealed that the above-mentioned vegetation cover (Eastern Free State Clay Grassland) has not been disturbed as the area does not have any agricultural activities currently taking place on site, with only a single jeep-Tack road witnessed on the area.

BASIC ASSESSMENT REPORT

Morgen 542 is underlined by the Triassic Aged sediments of the Tarkastad subgroup of Beaufort group forming part of the Karoo Supergroup. The southern boundary is very close to the Permian aged rocks of the Normandien Formation that forms part of the Adelaide subgroup of Beaufort group forming part of the Karoo Supergroup. Jurassic Aged intrusive, igneous dolerite forms sills throughout the area. The Tarkastad Formations (Trt) consists mainly of fine to medium grained olive brown sandstones and reddish mudstones. The Normandien Formation (Pne) consists of olive green to grey mudstones with subordinate sandstones. Dolerite (Jd) comprises of dark metamorphic rocks, or if weathered, dark clay soils.



Figure 4. Geology of the proposed site area

Conservation:

The proposed development site is located within a classified “degraded” area, according to the SANBI Free State Biodiversity Plan (2015). This is most likely due to prolonged anthropogenic activity in the area and therefore the proposed development will not compromise the ecological integrity of the site as it is already denuded of any ecology.

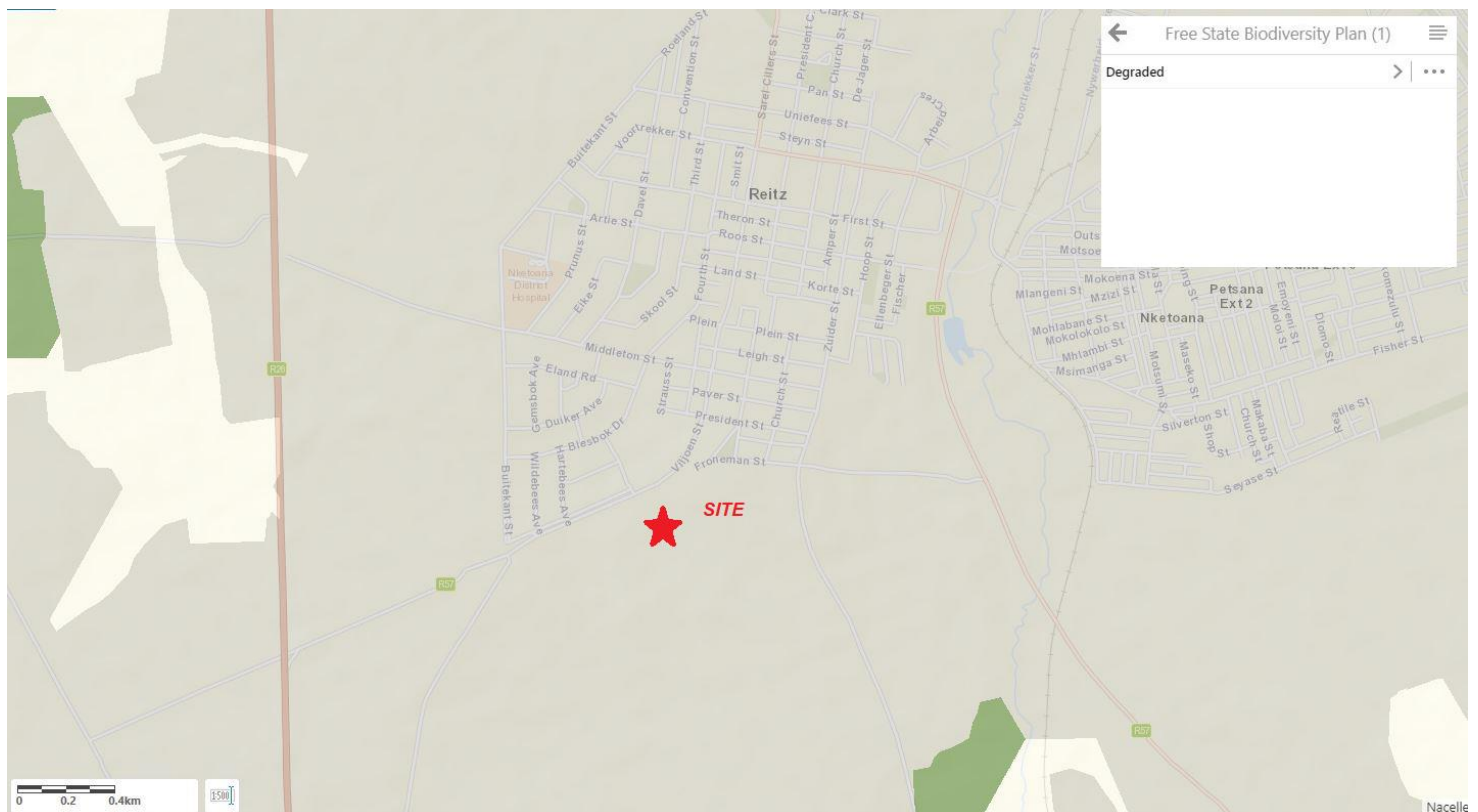


Figure 5. Free State Biodiversity Plan including the proposed development area

BASIC ASSESSMENT REPORT

Aquatic Ecology and Wetlands

There are no wetlands present on site. The closest wetland is approximately 2 kilometres southeast of the proposed site, thus the site bare no foreseen impact on it.

Remnant remaining portions of two small, first-order seasonal water drainage lines flow past the assessment area, approximately 220 m to the south and 270 m to the north, respectively. These drainage lines have however been significantly fragmented and degraded by existing agricultural cropland cultivation and residential transformation and are therefore merely viewed as being of low if any, hydrological and aquatic biodiversity value. Due to the significant distances between these drainage lines and the assessment area along with the completely ecologically isolated nature of the assessment area, the drainage lines will however not be further impacted upon in any way by the proposed development (EcoFocus, 2023).

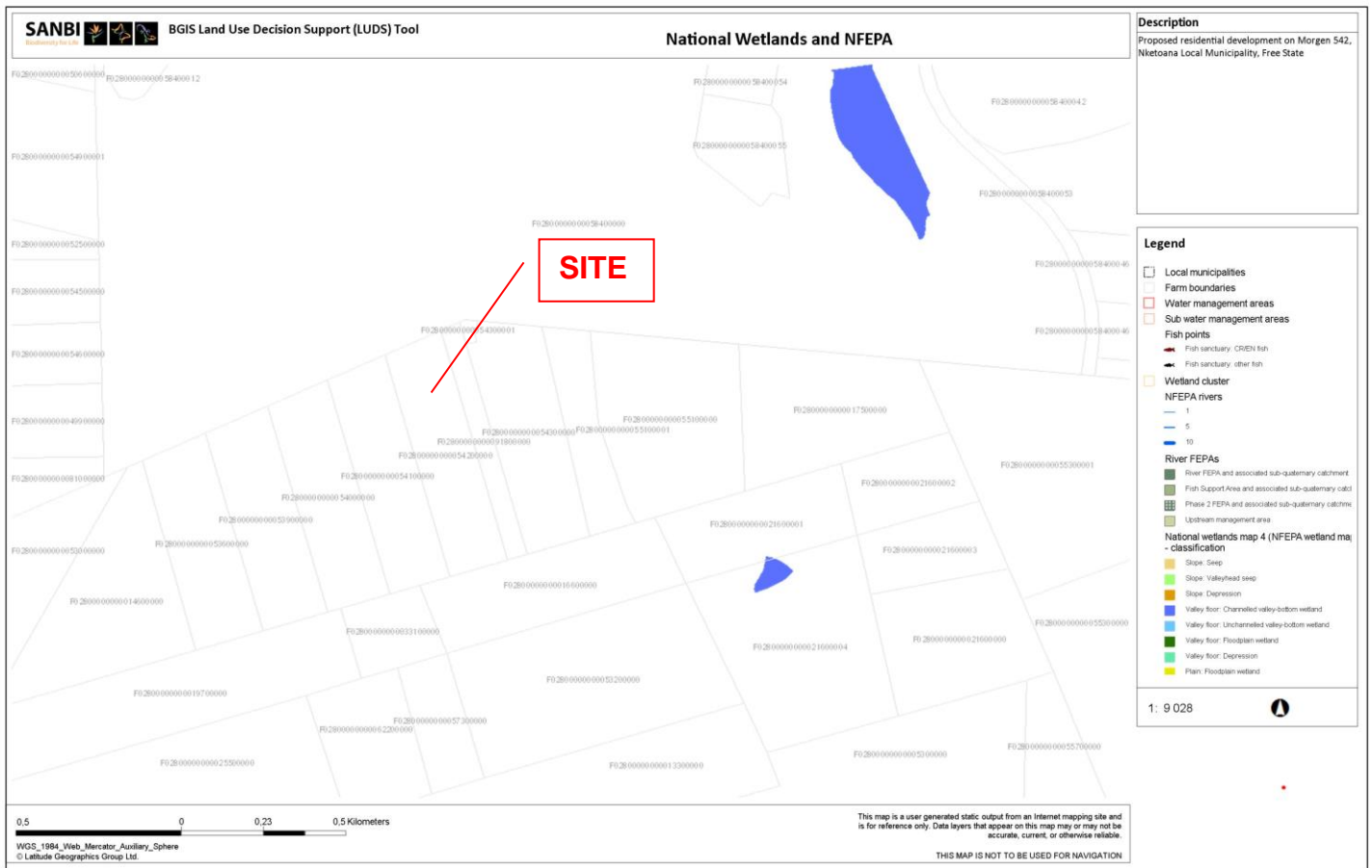


Figure 6. Wetlands map (SANBI bgis)

Conservation

The assessment area scored a very low Desktop Site Ecological Importance (SEI) value and is therefore not viewed as being of any overall conservational significance/value for habitat preservation and ecological functionality persistence in support of the surrounding ecosystem, broader vegetation type or the persistence of the Globally Near-Threatened Red Listed mammalian species *Hydrictis maculicollis* (Spotted-necked otter).

No significant potential long-term ecological impacts were identified for the construction- or subsequent operational phases of the proposed development. It is the opinion of the specialist, by application of the NEMA Mitigation Hierarchy, that all the identified potential cumulative ecological impacts associated with the proposed development, can be suitably reduced and mitigated to within acceptable residual levels, by implementation of the recommended mitigation measures. It is therefore not anticipated that the proposed development will add any significant residual cumulative ecological impacts to the surrounding environment, if all recommended mitigation measures as per this ecological report are adequately implemented and managed, for both the construction- and subsequent operational phases of the proposed development.

It is the opinion of the specialist that the proposed development of the assessment area should be considered by the competent authority for Environmental Authorisation and approval. All recommended mitigation measures as per this ecological report must however be adequately implemented and managed for both the construction- and subsequent operational phases of the proposed development. All necessary authorisations, permits and licenses must also be obtained prior to the commencement of any construction.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Ystervark Newspaper	
Date published	30 March 2023	
Site notice position	Latitude	Longitude
	27°48'39.07"S	28°25'29.60"E
	27°48'30.85"S	28°25'33.85"E
Date placed	10 October 2022	

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

2. DETERMINATION OF APPROPRIATE MEASURES

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

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

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Reitz Gastehuis	Neighbouring business	-
Riemland Dierhospitaal	Neighbouring business	0588633099
Claassen Creation	Neighbouring business	0795148370
Poelanies Guesthouse	Neighbouring business	0825646693

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
See comments and response report	See comments and response report

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/Organ of State	Contact person (Title, Name and Surname)	Tel No	e-mail	Postal address
Nketoana Local Municipality	Lekgetho Mokgetho	058 863 2811	lekgetho.mokgatthe.nketoana@fs.gov.za	P O Box 26, Reitz 9810
Thabo Mofutsanyane District Municipality	B.E Mzangwa	058 718 1000	mzangwa@tmdm.gov.za	Private Bag X810, Witsieshoek 9870
Department of Water and Sanitation-Free State	Mr. Nkhume Musekene	051 405 9281	MusekeneN2@dws.gov.za To CC: NtitiT@dws.gov.za KumaloZ@dws.gov.za MaseloaneK@dws.gov.za Mahlael@dws.gov.za LetloenyaneM@dws.gov.za LenongP@dws.gov.za	Bloem Plaza 2nd Floor, c/o Charlotte Maxeke & East Burger Street Bloemfontein 9300
Free State Department of Social Development	Ms L. Mnguni (Communications Officer)	0664739707	Lindiwe.Mnguni@fssocdev.gov.za	-
Nketoana Local Municipality- Ward 01 Councillor	Thabo Mokwena (Gert Mosia)	073 5428372 / 078 573 4508	mosiag@yahoo.com	-
Free State: Department of Public Works & Infrastructure	Office	051 492 3909	hodoffice@fsworks.gov.za	PO Box 960 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 as amended and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

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

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

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

BASIC ASSESSMENT REPORT

Proposal					
Planning Phase:					
<u>Activity:</u>	<u>Potential impacts:</u>	<u>Significance rating of impacts (positive or negative):</u>	<u>Proposed mitigation:</u>	<u>Significance rating of impacts after mitigation:</u>	<u>Risk of the impact and mitigation not being implemented</u>
Environmental Legal and Policy compliance	<u>Direct Impacts:</u> Failure to adhere to existing policies and legal obligations could lead to the project conflicting with local, provincial, and national policies, legislation etc. This could result in lack of institutional support for the project, overall project failure and undue disturbance to the natural environment.	Low-negative	The planning and design of the development must comply with all relevant legislation and policies.	Very Low-negative	Significant risk of a lack of institutional support for the project, overall project failure and undue disturbance to the natural environment.
	<u>Indirect Impacts</u>				
	<u>Cumulative Impacts</u> Improper planning will place a further burden and negative impact on the surrounding land uses and existing infrastructure services.	Low-negative	The planning and design of the development must comply with all relevant legislation and policies.	Very low-negative	Significant risk of urban sprawl and illegal activity, thus placing further pressure on the surrounding environment and existing infrastructure leading to potential system failure
No-go option					
Should the No-go option be implemented this activity would per	<u>Direct Impacts:</u> Vagrancy could start, with the associated safety risks.	Medium-negative	Vagrants and loiters should be encouraged to seek help through interventions by the local authorities.		

BASIC ASSESSMENT REPORT

definition not entail any construction impacts.	Invasion of alien plant species would continue unchecked. Loss of opportunities in terms of potential short- and long-term employment.				
--	---	--	--	--	--

Proposal					
Construction Phase:					
Activity:	Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
Construction camp and construction activities	<u>Direct Impacts:</u> Siting of construction camp could lead to negative environmental impacts including dust, noise, soil contamination and erosion, and visual pollution.	Low-negative	The construction camp should be located in an area that will not create a visual and noise hazard, and not create a traffic hazard. The position must be determined in conjunction with the Environmental Control Officer (ECO) (see Environmental Management Plan – Appendix F)	Very low-negative	Significant risk of negative environmental impacts including dust, noise, and visual pollution, including soil contamination and erosion.
	<u>Indirect Impacts:</u> The generation of dust, noise and visual impacts will create a nuisance factor in the area, particularly with regards to the surrounding residences.	Low-negative	Construction activities must account for reducing and controlling dust, noise and visual impacts- for the consideration of people living in the area. Method Statements must be written and adhered to for measures to control and reduce noise, dust and visual impacts.	Very low-negative	Significant risk of negative environmental impacts including dust, noise, and visual pollution, including soil contamination and erosion.

BASIC ASSESSMENT REPORT

			Construction work should only commence in normal working hours (08:00- 17:00) unless the residents are informed and agree to other working hours.		
	<u>Cumulative Impacts</u>				
Ecological - Impacts on indigenous vegetation	<p><u>Direct Impacts:</u></p> <p>Transformation of vegetation within the assessment area</p>	Low-negative	<p>This virtually complete loss and transformation of natural habitat, biota and basic ecosystem functionality throughout the majority of the assessment area and local, is deemed irreversible.</p> <p>Sufficient ecological restoration of the relevant vegetation type and its functionality throughout these majority portions, will therefore not be practicably feasible.</p> <p>The proposed development construction footprint must be kept as small as practicably possible to reduce the surface impact on surrounding vegetation and no unnecessary/unauthorised footprint expansion into the local or broader natural landscape surrounding the assessment area, may take place.</p>	Very Low-negative	Potential risk for land degradation

BASIC ASSESSMENT REPORT

			<p>No site construction basecamps may be established within the local or broader natural landscape surrounding the assessment area.</p> <p>Adequately cordon off the proposed development construction footprint area and ensure that no construction activities, -machinery or -equipment operate or impact within the local or broader surrounding natural landscape outside the cordoned off area.</p> <p>Adequate operational procedures for construction machinery and equipment must be developed in order to strictly govern and restrict movement of machinery only within the proposed development construction footprint area and to ensure environmentally responsible construction practices and activities.</p>		
	<u>Indirect Impacts</u>				
	<u>Cumulative Impacts</u>				

BASIC ASSESSMENT REPORT

<p>Ecological – Critical biodiversity area</p>	<p>Direct Impact: Transformation of a “Degraded Area” associated with the assessment area</p>	<p>Low- Negative</p>	<p>This virtually complete loss and transformation of natural habitat, biota and basic ecosystem functionality throughout the majority of the assessment area and local landscape, is deemed irreversible.</p> <p>Sufficient ecological restoration of the relevant vegetation type and its functionality throughout these majority portions, will therefore not be practicably feasible.</p> <p>The proposed development construction footprint must be kept as small as practicably possible to reduce the surface impact on surrounding vegetation and no unnecessary/unauthorised footprint expansion into the local or broader natural landscape surrounding the assessment area, may take place.</p> <p>No site construction basecamps may be established within the local or broader natural landscape surrounding the assessment area.</p> <p>Adequately cordon off the</p>	<p>Very low- Negative</p>	
---	--	-----------------------------	---	----------------------------------	--

BASIC ASSESSMENT REPORT

			<p>proposed development construction footprint area and ensure that no construction activities, -machinery or - equipment operate or impact within the local or broader surrounding natural landscape outside the cordoned off area.</p> <p>Adequate operational procedures for construction machinery and equipment must be developed in order to strictly govern and restrict movement of machinery only within the proposed development construction footprint area and to ensure environmentally responsible construction practices and activities.</p>		
<p>Ecological – Protected species</p>	<p><u>Direct Impact:</u> Destruction of-/damage to Red Data Listed, nationally- and/or provincially protected species individuals/habitats associated with the assessment area</p>	<p>Low- Negative</p>	<p>This virtually complete loss and transformation of natural habitat, biota and basic ecosystem functionality throughout the majority of the assessment area and local landscape, is deemed irreversible.</p> <p>Sufficient ecological restoration of the relevant vegetation type and its functionality throughout these majority portions, will therefore not be practicably feasible. The proposed development</p>	<p>Very low - Negative</p>	

BASIC ASSESSMENT REPORT

			<p>construction footprint must be kept as small as practicably possible to reduce the surface impact on surrounding vegetation and no unnecessary/unauthorised footprint expansion into the local or broader natural landscape surrounding the assessment area, may take place.</p> <p>No site construction basecamps may be established within the local or broader natural landscape surrounding the assessment area.</p> <p>Adequately cordon off the proposed development construction footprint area and ensure that no construction activities, -machinery or -equipment operate or impact within the local or broader surrounding natural landscape outside the cordoned off area.</p> <p>Adequate operational procedures for construction machinery and equipment must be developed in order to strictly govern and restrict movement of machinery only within the proposed development construction</p>		
--	--	--	--	--	--

BASIC ASSESSMENT REPORT

			<p>footprint area and to ensure environmentally responsible construction practices and activities.</p> <p>Disturbed areas within and immediately surrounding the proposed development footprint area must be adequately rehabilitated as soon as practicably possible after construction.</p>		
<p>Ecological – Alien invasives</p>	<p>Direct Impacts: Terrestrial and aquatic alien invasive species establishment</p>	<p>Low- negative</p>	<p>It is recommended that all individuals of identified alien invasive species must be actively eradicated from the assessment area, in accordance with the requirements of the National Environmental Management: Biodiversity Act (Act 10 of 2004); Alien and Invasive Species Regulations, 2014. Removed materials must also be adequately and lawfully disposed of, in order to prevent potential further spreading/dispersal.</p>	<p>Very low-Negative</p>	

BASIC ASSESSMENT REPORT

<p>Hydrological – Water drainage area</p>	<p><u>Direct Impact:</u> Impeding and contamination within the associated local and broader quaternary surface water catchment- and drainage area</p>	<p>Low- negative</p>	<p>Disturbed areas within and immediately surrounding the proposed development footprint area must be adequately rehabilitated as soon as practicably possible after construction.</p> <p>Hydrocarbon and other chemical storage areas must be adequately banded in order to be able to contain a minimum of 150 % of the capacity of storage tanks/units.</p> <p>Adequate hydrocarbon and other chemical storage, handling, usage and spillage clean-up procedures must be developed and all relevant construction personnel must be sufficiently trained on- and apply these procedures during the entire construction phase.</p> <p>Spill kits must be readily available on the construction site. All employees must be adequately trained on the correct procedure and use of the spill kits.</p>	<p>Very low- negative</p>	
--	---	-----------------------------	--	--------------------------------------	--

BASIC ASSESSMENT REPORT

Hydrological – Storm water System and water supply	<p><u>Direct Impacts:</u></p> <p>Initially storm water runoff will be as per natural state i.e. infiltration into soils and sheet washing. The construction and associated compacting of soils and land transformation will result in higher levels of storm water runoff, with the possibility of increased erosion and decline in water quality.</p>	Medium-negative	<p>Sufficient continued stormwater runoff within- and through the local landscape towards the north-west, must be ensured and sufficiently managed. The development design layouts for the proposed residential infrastructure, must include adequate stormwater management measures to ensure that sufficient volumes and quality of surface water runoff from the proposed development footprint area, are still channelled back into the local catchment towards the north-west.</p>	Low-negative	<p>Increased risk of soil erosion and compromised water quality.</p>
	<p><u>Indirect Impacts:</u></p> <p>The development will be negatively affected if water supply and construction of infrastructure is not considered. The construction phase of the development will require very little water.</p>	Very Low-negative	<p>Personnel will be instructed not to waste water during the construction phase.</p>	Very Low-negative	<p>Risk of construction processes being delayed, and extended time may result in increased impacts on the environment and local infrastructure</p>
Waste – Sewage / Effluent	<p><u>Direct Impacts:</u></p> <p>Very little sewage will be generated during the construction phase.</p>	Very Low-negative	<p>Portable toilets will be supplied for personnel during the construction phase of the development. Thereafter, suitable connection to the municipal sewerage system will take place.</p>	Very low-negative	<p>Risk of increased pressure on local sewage management systems</p>
	<p><u>Indirect Impacts</u></p>				
	<p><u>Cumulative Impacts</u></p>				

BASIC ASSESSMENT REPORT

<p>Waste – Building Rubble & Littering</p>	<p><u>Direct Impacts:</u></p> <p>Littering may occur by personnel during construction phase. Building waste will thus be continuously generated in small quantities over the construction period.</p>	<p>Very Low-negative</p>	<p>The building waste will be transported at the Building Contractors / Developer's cost to the Municipality's landfill site.</p> <p>Waste and litter drums will be placed at strategic points for use by personnel.</p> <p>The drums will be regularly emptied, and waste removed to the Municipality's landfill site. The municipality should ensure that municipal by-laws regarding waste disposal are upheld.</p> <p>Illegal dumping of domestic and other waste should not be allowed. Warning signs should be erected, spot fines imposed or even prosecution should occur if dumping continues. The Developer will display an all-hours telephone number on the site for emergency calls or complaints.</p>	<p>Very Low-negative</p>	<p>Increased waste will add pressure to an already severely degraded environment, placing the environment at further risk as well as the health of local residents</p>
<p>Land transformation – Dust Levels</p>	<p><u>Direct Impacts:</u></p> <p>Increased dust levels due to the clearing of vegetation, earthmoving activities and movement of vehicles may impact on air quality and possibly surrounding natural vegetation.</p>	<p>Low-negative</p>	<p>Implement suitable dust management and prevention measures during the construction phase of the proposed development.</p> <p>Construction areas and –roads to be sufficiently wetted down</p>	<p>Very low-negative</p>	<p>Increased risk of dusty environment and potential negative impact on natural vegetation.</p>

BASIC ASSESSMENT REPORT

			<p>during the construction phase in order to prevent significant fugitive dust emissions.</p> <p>Adequate operational procedures for machinery and equipment must be developed to strictly govern and restrict movement of machinery, in order to avoid unnecessary fugitive dust emissions and ensure environmentally responsible construction practices and activities.</p> <p>Disturbed areas within and immediately surrounding the proposed development footprint area must be adequately rehabilitated as soon as practicably possible after construction.</p> <p>The Developer will display an all-hours telephone number on the site for emergency calls or complaints.</p>		
<p style="text-align: center;">Land transformation – Noise Levels</p>	<p><u>Direct Impacts:</u></p> <p>Increased levels of noise due to earthmoving & construction activities. Associated noise may potentially impact on existing residents within the area.</p>	<p style="text-align: center;">Low-negative</p>	<p>The Developer will ensure that noise levels are kept to a minimum by: Limiting operation of heavy earthmoving equipment and construction activities to normal working hours, and to normal workdays (i.e. Monday to Friday, between 08h00 and 17h00).</p>	<p style="text-align: center;">Very low-negative</p>	<p>Persistent exposure to high levels of noise could impact the emotional well-being of surrounding residents if not mitigated.</p>

BASIC ASSESSMENT REPORT

			Silencers (sound bafflers) will be maintained to ensure effective sound dampening. The Developer will display an all-hours telephone number on the site for emergency calls or complaints.		
Increased levels of traffic	<p><u>Direct Impacts:</u></p> <p>The transportation of construction and road building material will increase traffic. The additional trips could have negligible impact on the current traffic flows and may impact the occurrence of road vehicle related incidents</p>	Medium-negative	The Developer will ensure that traffic flow is not impeded by avoiding the transportation of materials during peak traffic hours of 7:00 am – 8:00am and 4:00pm – 5:00pm.	Low-negative	Increased traffic poses a risk in terms of traffic flow in peak times and potential road accidents if not mitigated.
	<p><u>Indirect Impacts</u></p>				
	<p><u>Cumulative Impacts</u></p>				
Socio-economic	<p><u>Direct Impacts:</u></p> <p>Casual labour taking advantage of the job opportunities created by the construction phase may increase the number of people loitering, levels of vagrancy and possibly petty crime</p>	Low-negative	<p>The Developer will secure the building site by fencing off the construction yard.</p> <p>The Developer should ensure that the appointed building contractor manages his/her labour force in such a way as to discourage the employment of casual labour.</p> <p>Labour should be transported to and from work.</p> <p>Labour brokering, if allowed, should be dealt with off-site. Later construction of the houses will be undertaken by individual homeowners and</p>	Very low-negative	If scheduling and management is not adhered to, the risk of petty theft and unauthorized access is probable

BASIC ASSESSMENT REPORT

			their appointed contractors and thus is difficult to regulate.		
	Employment of local labour forces for short-term contracts for the construction phase	Low-positive	The Developer should ensure that the appointed building contractor manages his/her labour force in such a way as to discourage the employment of casual labour. Labour should be transported to and from work.	Medium-positive	If local labour is not properly utilized, casual labour may take advantage of the job opportunities created by the construction phase may increase the number of people loitering, levels of vagrancy and possibly petty crime
	<u>Indirect Impact:</u> Employment of local labour could result in opportunity in community upliftment, assist in poverty eradication, and provide opportunity for improved livelihood amongst locals	Medium-positive			
NO-GO Option					
Should the No-go option be implemented this activity would per definition not entail any construction impacts.	<u>Direct Impacts:</u> Vagrancy could start, with the associated safety risks. Invasion of alien plant species would continue unchecked. Loss of opportunities in terms of potential short- and long-term employment.	Medium-negative	Vagrants and loiters should be encouraged to seek help though interventions by the local authorities. Alien plants should be cleared. Alien invasive plants should be cleared.	Low-negative	

BASIC ASSESSMENT REPORT

Proposal					
Operational Phase:					
Activity:	Potential impacts:	Significance rating of impacts (positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
Ecological impacts on Fauna and Flora	<p>Direct Impacts:</p> <p>Loss of species and or habitat due to transformation.</p>	Very low-negative	<p>None.</p> <p>The proposed development site is ecologically transformed beyond restoration.</p>	Very low-negative	
Hydrological – Water	<p>Direct Impacts:</p> <p>Over-utilisation of potable water by the residential development</p>	Low-negative	<p>Only the allotted water quantities as per the approved Water Use License are to be utilised.</p> <p>A flow meter is to be installed in order to enable monitoring and management of water consumption.</p> <p>Water consumption figures must be submitted to the Department of Water and Sanitation (DWS) on a regular basis in order to ensure compliance with the allotted water quantities as per the approved Water Use License.</p> <p>Water saving initiatives must be implemented for the residential development.</p> <p>Environmentally responsible water use practices and activities must be adopted for the residential development.</p> <p>Provide training interventions for the local community on the</p>	Very low-negative	

BASIC ASSESSMENT REPORT

			correct environmentally responsible water use practices and activities within the residential development.		
Hydrological – water drainage	<p><u>Direct Impacts:</u></p> <p>Continued impeding of the flow regime within the associated local and broader quaternary surface water catchment- and drainage area</p>	Low- negative	<p>If all the recommended mitigation measures for the construction phase are adequately implemented and managed, it should prove sufficient in preventing any continued impeding-, contamination of- or significant impact within the associated local and broader quaternary surface water catchment- and drainage area.</p> <p>The storm water management measures must be adequately maintained.</p>	Very low - negative	
Wastewater- Sewerage	<p><u>Direct Impact:</u></p> <p>Sewage contamination of soil and groundwater</p>	Low- negative	<p>An adequate sewage management system must be installed for the proposed development within the assessment area.</p> <p>Adequate leakage detection and prevention systems must be installed into the sewage management system in order to detect any potential leakages and subsequent contamination of underground water.</p> <p>If any leakages or overflows of the sewage management</p>	Very low- negative	

BASIC ASSESSMENT REPORT

			system occur, the competent authority must immediately be notified and the necessary steps must be followed by the applicant to locate and remediate the source of contamination, as soon as practicably possible/feasible.		
Waste – Domestic	<p><u>Direct Impacts:</u></p> <p>Increase of domestic waste will be generated per month by the development and increased waste dumping.</p>	Low-negative	<p>Domestic garbage/waste dumping within the local surrounding landscape to the north and east of the assessment area, must be prevented.</p> <p>Implement adequate waste collection and disposal management measures and services for the new residential development, in order to prevent undesired disposal/dumping into the surrounding undeveloped areas.</p> <p>Provide training interventions for the local community on the correct management of domestic waste/garbage within the residential settlement.</p> <p>Waste and litter drums could be placed at strategic points for use by the public. The drums will be emptied regularly.</p>	Very low-negative	Improper waste management will place additional strain on municipal waste management systems

BASIC ASSESSMENT REPORT

			Waste minimization strategies could be investigated by the Municipality to encourage the composting of vegetative waste and recycling of glass, paper and plastics.		
	<u>Indirect Impacts</u>				
	<u>Cumulative Impacts</u>				
Traffic Impact	<u>Direct Impacts:</u> The proposed development will generate additional traffic in the area but according to the Traffic Impact Assessment, it is within capacity.	Medium-negative	Traffic will be accommodated through the existing roads and an additional intersection will be developed, parking will be available on site. The use of public transport will also mitigate increased traffic.	Low-negative	
	<u>Indirect Impacts</u>				
	<u>Cumulative Impacts</u>				
NO-GO Option					
Should the No-go option be implemented this activity would per definition not entail any construction impacts.	<u>Direct Impacts:</u> Vagrancy could start, with the associated safety risks. Invasion of alien plant species would continue unchecked. Loss of opportunities in terms of potential short- and long-term employment.	Medium-negative	Vagrants and loiters should be encouraged to seek help through interventions by the local authorities. Alien plants should be cleared. Alien invasive plants should be cleared. The local authority's LED policy would be tested to find replacement employment opportunities. Increased burden on state for social security.	Low-negative	

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

Alternative A (preferred alternative)

During the construction phase dust and noise will be a nuisance, however if the proper mitigation measures are put in place the impacts can be reduced significantly, this includes the monitoring of dust and dust suppression through water carts as well as the adherence to strict working schedules (08:00am – 05:00pm).

The area currently has largely transformed vegetation cover present.

The impact the proposed development will have on traffic (generation of additional traffic volumes) as a result of especially construction vehicles can be mitigated through the delivery of construction materials during non- peak traffic hours. Should the construction vehicles damage any of the road surfaces it would also be the responsibility of the contractor to fix such areas.

Storm water system will be formalized on site and water supply will be done by the local community, sufficient capacity has been confirmed through the confirmation of bulk services letter

Waste from the development will be handled through a licensed solid waste disposal site. The site is therefore entitled to weekly domestic waste removal.

The area has no ecological significance whatsoever in its present state.

These impacts can all be adequately addressed by the implementation of suitable mitigation measures.

There is only one layout considered.

In the opinion of the consultant, there are no environmental impacts that have been identified that will be detrimental to the environment to such an extent that the proposed development should not be permitted, nor were any sensitive environmental components or fatal environmental flaws identified within the study area, such that should result in refusal of environmental authorization for this application. Therefore, it is recommended that this application receives favourable consideration, given that the overall social impact of this proposed activity will be of a positive nature.

Alternative B

--

Alternative C

--

No-go alternative (compulsory)

The proposed development is preferred above the No-go Option for reasons including that the housing development will contribute to the local economy in the short term (construction phase) and potentially create a larger number of permanent employment opportunities in the longer term (operational phase).

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
-----	----

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

--

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

<p>In our opinion the most significant mitigation measures / conditions would be:</p> <p>Construction Phase:</p> <p>Noise and dust pollution should be managed and strict adherence to the EMP should be applied during the construction phase of the townhouses.</p> <p>Fauna found on the subject land should not be harmed, but carefully removed to a place of safety by a suitably qualified person, permits should be applied for the indigenous trees' removal if deemed necessary.</p> <p>Ensure that physical disturbances to the surrounding natural vegetation be kept to a minimum, including the prevention of soil erosion and dust.</p> <p>Ensure that firefighting equipment is available and that the personnel are trained. Prevent workers from starting open fires or cooking outside demarcated areas, special care should be taken at area towards the north and western borders.</p> <p>In the event that human or archaeological remains are found, work in that area should stop, the area demarcated, and the South African Heritage Resources Agency or Free State Heritage Recourse Authority be contacted respectively.</p> <p>An environmental control officer must ensure that construction activities during the installation of services adhere to the conditions set in the EA and EMP.</p> <p>Operational Phase:</p> <p>Please refer to the EMP of this report to view all mitigation measures that we feel are necessary in order to prevent any significant environmental degradation from occurring as a result of the proposed development.</p>
--

Is an EMP attached?

YES	NO
-----	----

The EMP 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.

BASIC ASSESSMENT REPORT

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.

Danie Krynauw

NAME OF EAP



SIGNATURE OF EAP

16 October 2023

DATE

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

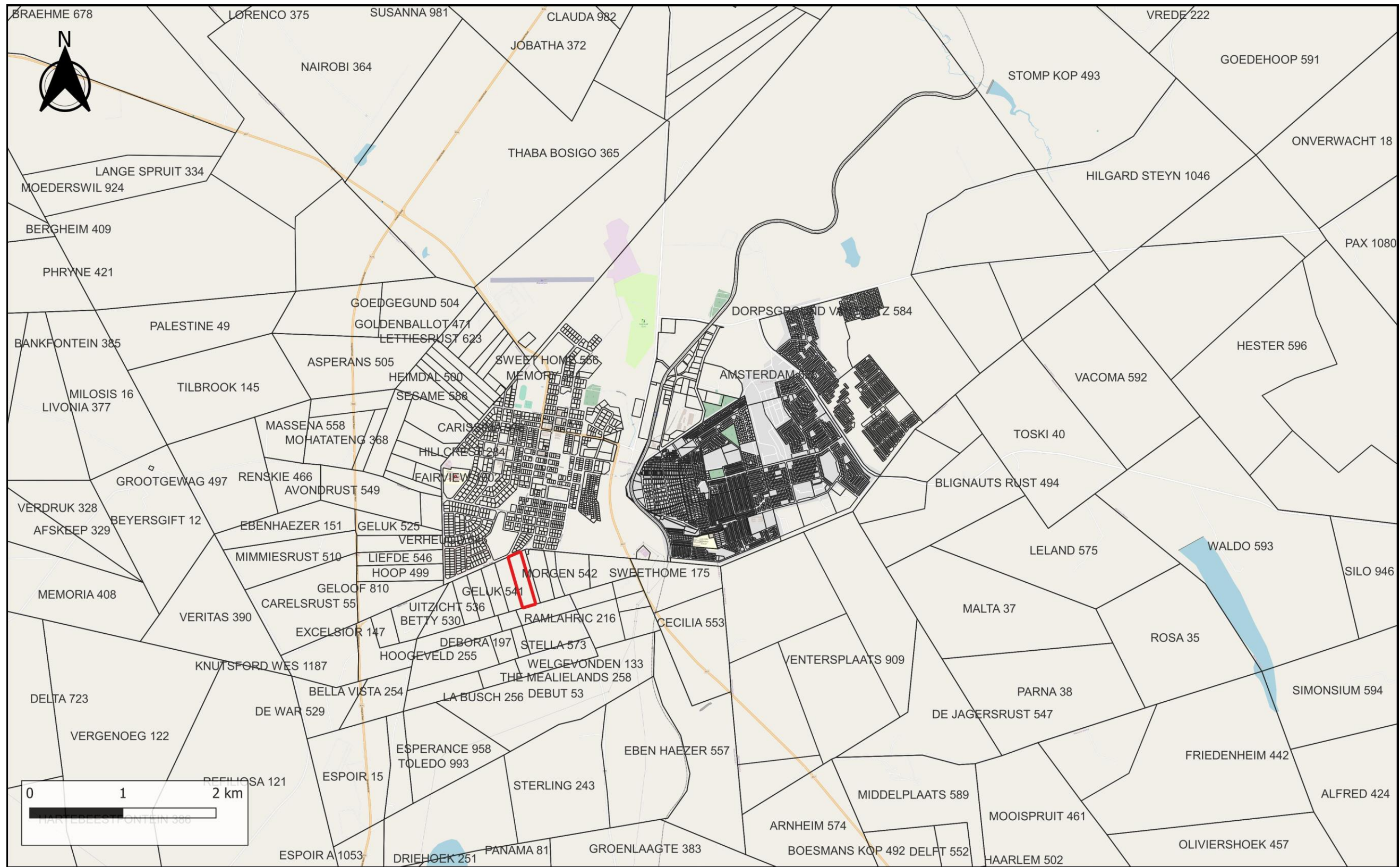
Appendix I: Specialist's declaration of interest

Appendix J: Additional Information

Appendix A: Maps

Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Municipality, Free State Province.





Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province.



1:50 000 Locality Map
 Prepared for: Gert Trek Familietrust
 Prepared by: Green-Box Consulting
 QGIS 3.22.0 - Białowieża
 22 May 2023

Appendix B: Photographs



Photo 1 – Existing transformation of a section of the property with bare soils



Photo 2: Patches of grassland present on site



Photo 3 – Soil stockpiles



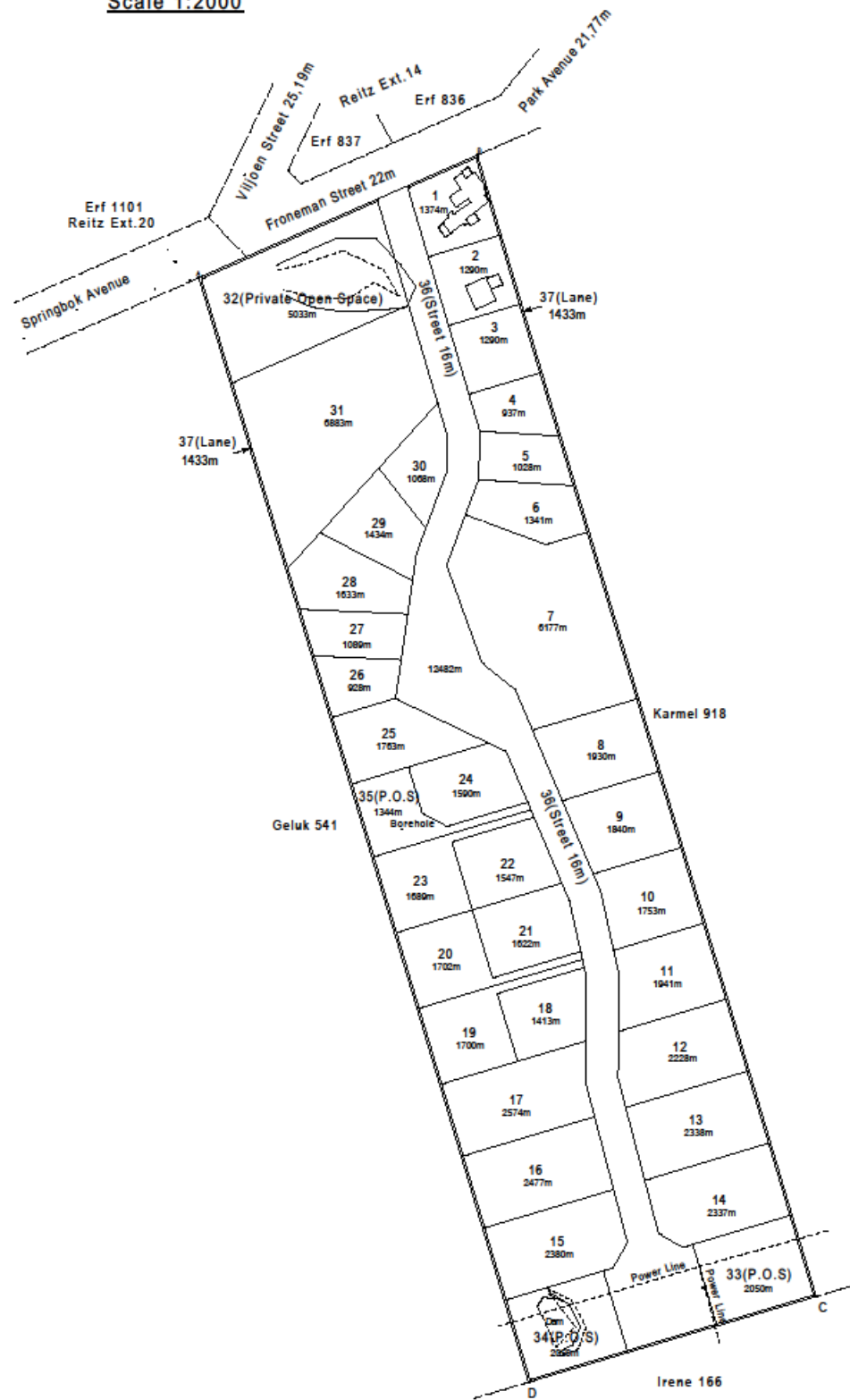
Photo 4 – Typical character of the property

Appendix C: Facility illustration(s)

Sketch Plan of subdivision of the farm Morgen No.542

Nketoana Local Municipality
Administrative District : Reitz, Province : Free State

Scale 1:2000



Proposed Zoning	Site Numbers	Total Area(sqm)	% of Total Area
Single Residential	1-6, 8-30	48236	56,29
Town Houses(25 Units/Ha)	7, 31	13060	15,24
Private Open Space	32-35	10477	12,23
Street	36	12482	14,57
Lane	37	1433	1,67
	37	85688	100,00

Appendix D: Specialist reports (including terms of reference)

1. Heritage Impact Assessment
2. Terrestrial Impact Assessment
3. Geotechnical Assessment
4. Traffic Impact Assessment
5. Bulk Services Assessment

Appendix E: Public Participation

Publication name	Ystervark Newspaper	
Date published	30 March 2023	
Site notice position	Latitude	Longitude
	27°48'39.07"S	28°25'29.60"E
	27°48'30.85"S	28°25'33.85"E
Date placed	10 October 2022	

Advert

Notice

ROUX WITZ

TL LE ROUX/zb/
BOU29/0001
HUMAN, LE ROUX &
MEYEROWITZ
24 NAUDE STREET, BETHLEHEM, 9701
P O BOX 563, BETHLEHEM, 9700
TEL. NO. 058 307 0300
FAX. NO. 058 303 3408 / 086 527 3639

Legal notice

NOTICE OF APPLICATION FOR REGISTRATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON FARM MORGEN 542, REITZ, FREE STATE In terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended April 2017) published under the National Environmental Management Act, 1998 (Act No.107 of 1998) (NEMA), as amended, notice is hereby given of Gert Track Familietrust intention to obtain environmental authorisation for the development of residential units with associated infrastructure. Green-Box Consulting is appointed as the Environmental Assessment Practitioner. Location of the proposed project: The land area earmarked for the facility is approximately 1.5km south of the Reitz CBD. The site is described as the farm Morgen 542, situated at middle point site coordinates - 27°48'46.08"S 28°25'34.41"E. Environmental Authorisation: The project triggers activities listed in Listing 1, (GN R 327) of the 2014 EIA Regulations (as amended April 2017), published under NEMA and therefore requires environmental authorisation via the undertaking of a Basic Assessment process. The Basic Assessment process will be inclusive of technical studies and public participation. The competent authority responsible for issuing environmental authorization is the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs. The application for environmental authorisation is for the following listed activities: Listing Notice 1 (GNR No. 327) Activity no. 24, 27 and 28. Should you wish to obtain additional information, register as an Interested and Affected Party (I&AP) or comment on the proposed project, please contact Green-Box Consulting at: P.O. Box 37738, Langenhovenpark 9330, Cell: 082 435 2108, e-mail: danie@green-box.co.za

Snippet of the advertisement placed (Ystervark Newspaper, 30 March 2023)

Almal voltooi ultra-marathon

Altesaam 13 atlete van Bethlehem-marathonklub het op 18 Maart aan die Om-die-Dam ultra-marathon by Harteeboesportdam deelgeneem. Hulle was deel van die 4000 atlete wat by Hoërskool Harteeboesport weggespring het en 'n roete om die dam gevolg het. Henriette Nieuwenhuizen, voorsitter

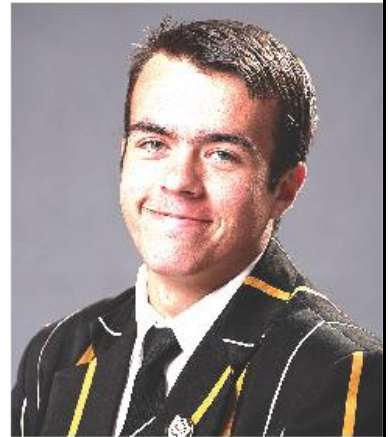
van die klub, sê alhoewel dit baie warm was, het hulle almal die wedloop in die gegewe tyd voltooi. Foto, l-r: Van die atlete van Bethlehem-marathonklub wat aan die Om-die-Dam ultra-marathon deelgeneem het. Voor: Aiden Shields, Maryna van Strijp, Raymond Smit en Izelle Molier. Agter: Hanmarie Lombaard, Elmarie Kruger, Henriette Nieuwenhuizen, Muller Jansie van Rensburg en Leon Roos. Afwesig: Rudi Halgryn, Francois de Bruin, Wouter de Beer en Werner Martin.



Karate: Harrismith-deelnemer presteer

Tydens die Suid-Afrikaanse Nasionale alle-style karate-kampioenskappe 2023 vir kinders, kadette en juniors, van 16 tot 19 Maart in Durban, het Josh Bezuidenhout van Harrismith uitstekend presteer. Josh is 'n leerder van Bethlehem Voortrekkers Hoërskool.

Josh het 'n bronsmedalje vir kumite in sy ouderdom en gewigsafdeling gewen. Hy is ook ingesluit in die nasionale oefenkamp-groep. Uit hierdie groep word 'n Proteaspan gekies wat aan verskeie internasionale geleenthede sal deelneem, onder andere Africa Region South en WKF Youth League. Josh sal ook gedurende die jaar aan verskeie nasionale ligas deelneem. Foto: Josh Bezuidenhout. Deur Charlene Stogforth, aftrigter/Sensei.



Oos-Vrystaters neem deel aan Kaapstad-fietstoer



Die 45ste Kaapstad-fietstoer oor 42km het op 12 Maart in Kaapstad plaasgevind. Onder die duisende deelnemers was 'n aantal Oos-Vrystaters, onder meer Johnny en Verne-Mary Eyberg en hul dogter, Inili du Plessis. Haar vriend, Rikus Bothma, het saam met hulle deelgeneem. Die fietsren het in 1977 sy oorsprong gehad en altesaam 500 fietsryers het toe deelgeneem. Vanjaar het deelnemers onder meer verby die Kasteel en die Nelson Boulevard gery waarna die Universiteit van Kaapstad en die Kaappunt Natuurreservaat gevolg het. Dit was byna halfpad vir die ryers. Hierna het Visboek, Chapman's Peak, Houtbaai, Kampsbaai, Clifton en Seepunt gevolg. Foto: Inili du Plessis en Rikus Bothma. Deur Lynda Greyling

Janine Steyn wen swem-medalje

Janine Steyn van die Bethseals Swemklub het verriede naweek aan die Masters Swimming Championship in Neispruit deelgeneem. Sy het 'n silwer medalje verower in die 50m vryslag. Bethseals: Be the best you can be.



Volleyball Tournament

Make a team of 4 people and enter the volleyball tournament to be held on 1 April at Affi Aarde in Bethlehem. Cost is R100 per team. Prizes to be won. Phone Keanu on 078 547 6676 or Francois on 071 623 7214 to enter.

The Perfect Corner The Perfect Lodge 50 Over League results

On Saturday Bok 1 played Harrismith in Harrismith. Bok 1 won the toss and bowled first, bowling Harrismith all out for 57 in 24.4 overs. Best batsmen for Harrismith were Farzaan Khan with 13 from 45 balls, and Chavico Hillier 11 from 23 balls. Best bowlers for Bok 1 were Armand Kemp with 6 wickets for 15 runs from 7 overs, and Fran-

cois van Rooyen with 3 wickets for 19 runs in 7 overs. Bok 1 then scored 58 for 1 in 10.3 overs. The best batsmen for Bok 1 were Dean Bubb with 27 from 27 balls not out, and Armand Kemp with 15 from 27 balls not out. Best bowler for Harrismith was Tiaan Marais with 1 wicket for 18 runs in 5 overs. Bok 1 won by 9 wickets.

Legal notice

IN SPANSHURBELLAAR
LOST or DESTROYED DEED
 Kindly place the following advertisement please. Notice is hereby given in terms of Regulation 68 of the Deeds Register Act, 1997, of the intention to apply for the issue of a certified copy of Deed of Transfer T 28353/1998 passed by Anna Magdalena Visser, Identity Number 47005 006 08 6 and Gerbrecht Catharina Groenewald, Identity Number 50023 005 08 3 in respect of Erf 1196 Bethlehem Extension 6, District Bethlehem, Free State Province in Estate: 1199 (One Thousand One Hundred and Ninety Nine) square metres Property held by Deed of Transfer T 28353/1998 which has been lost or destroyed All interested persons having objection to the issue of such copy are hereby required to lodge the same in writing with the Registrar of Deeds at Bloemfontein within two weeks from the date of the publication of this notice. Dated at Bethlehem this 22nd of March 2023. **NEMANN GROEBELAAR ATTORNEYS** 3 TEBRON STREET BETHLEHEM info@damre.co.za Tel: 058-3031263 Ref: Groebelaar/g/TENZ0001

Legal notice

FIRST LIQUIDATION AND DISTRIBUTION ACCOUNTS IN DECEASED ESTATES LYING FOR INSPECTION
 In terms of section 35 (5) of the Administration Act, No. 66 of 1965, notice is hereby given that copies of the liquidation and distribution accounts (first and final, unless otherwise stated) in the estate specified below will be open for the inspection of all persons with an interest therein for a period of 21 days from date 30/03/2023 and at the offices of the Masters of the High Court and Magistrates as stated. Should no objection thereto be lodged with the Masters concerned during the specific period, the executor will proceed to make payments in accordance with the accounts. Estate Late ERNA EILEN BOURN Identity Number 2407050017008 Marital Status WIDOW Deceased Estate Number 003395/2021 Address PLOT 10 KROMKLOOF NORTH, BETHLEHEM Date of death 2 April 2020 Magistrate's Office BETHLEHEM Master's Office BLOEMFONTEIN EXECUTOR/AUTHORIZED AGENT

TL LE ROUX/BOUZOS/001
HUMAN LE ROUX & MEYEROWITZ
 24 NAUDE STREET, BETHLEHEM, 9701
 P O BOX 563, BETHLEHEM, 9700
 TEL. NO. 058 307 0500
 FAX. NO. 058 303 3408/086 527 3639

Legal notice

NOTICE OF APPLICATION FOR REGISTRATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON FARM MORGIEV 542, REITZ, FREE STATE In terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended April 2017) published under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended, notice is hereby given of the fact that the applicant intends to obtain environmental authorisation for the development of residential units with associated infrastructure. Green-Box Consulting is appointed as the Environmental Assessment Practitioner. Location of the proposed project: The land area earmarked for the facility is approximately 1.5km south of the Reitz CBD. The site is described as the farm Morgen 542, situated at middle point site coordinates - 27°48'46.08"S 28°25'34.41"E. Environmental Authorisation: The project triggers activities listed in Listing 1, (GNR 327) of the 2014 EIA Regulations (as amended April 2017), published under NEMA and therefore requires environmental authorisation via the undertaking of a Basic Assessment process. The Basic Assessment process will be inclusive of technical studies and public participation. The competent authority responsible for issuing environmental authorisation is the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs. The application for environmental authorisation is for the following listed activities: Listing Notice 1 (GNR No. 327) Activity no. 24, 27 and 28. Should you wish to obtain additional information, register as an Interested and Affected Party (I&AP) or comment on the proposed project, please contact Green-Box Consulting at: P.O. Box 37738, Langenhovenpark 9350, Cell: 082 435 2108, e-mail: damie@green-box.co.za

Kennigewing ten opsigte van 'n lisensie-aansoek ingevolge die Wet op Petroleumprodukte, 1977 (Wet No 120 van 1977)

Hierdie kennigewing dien om alle belangstellende en geaffekteerde partye, in te lig dat KOMAKO PETROLEUM (ED MS) BPK, hierna na verwys as "die applikant", 'n aansoek ingedien het vir 'n KLEINHANDEL-lisensie, aansoeknommer C/20 23/02/66/0001.

TOESTEMMING OM BESIGHEIDPERSEEL TE OKKUPIEER

1 BOLATA SHOPPING CENTRE
 BOLATA VILLAGE
 BOLATA VILLAGE

Die doel van die aansoek is dat die applikant 'n lisensie verky om petroleum kleinhandelaktiwiteit te onderneem soos uiteengesit in die aansoek. Reëlings vir die besigging van die aansoek dokumentasie kan getref word deur die "Controller of Petroleum Products" te kontak by:
 - Telefoon: (057) 391 1300; of
 - Faks: (057) 352 2673, of
 - E-pos: Kagisho Molake@dmre.gov.za

Enige besware teen die uitreiking van 'n lisensie ten opsigte van hierdie aansoek, wat die aansoeknommer hierbo duidelik aanhaal, moet by die "Controller of Petroleum Products" ingedien word binne 'n tydperk van twintig (20) werksdae vanaf die datum van publikasie van hierdie kernigewing. Sodanige beswaar moet ingedien word by die volgende fisiese- of posadres:

Fisiese adres:
 The Controller of Petroleum Products
 Department Mineral Resources & Energy
 314 Stateway Street, The Strip Building, Welkom

Posadres:
 The Controller of Petroleum Products
 Department Mineral Resources & Energy
 Private Bag X 3658, Welkom, 9460
 Pivaatsak X 3658, Welkom, 9460

ON-SITE NOTICE
NOTICE OF ENVIRONMENTAL APPLICATION
Residential development, Morgen 542, Reitz

In terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended April 2017) published under the National Environmental Management Act, 1998 (Act No.107 of 1998) (NEMA), as amended, notice is hereby given of **Gert Track Familietrust** intention to obtain environmental authorisation for the development of residential units with associated infrastructure. Green-Box Consulting is appointed as the Environmental Assessment Practitioner.

Location of the proposed project: The land area earmarked for the facility is approximately 1.5km south of the Reitz CBD. The site is described as the farm Morgen 542.

Environmental Authorisation: The project triggers activities listed in Listing 1, (GN R 327) of the 2014 EIA Regulations (as amended April 2017), published under NEMA and, therefore required environmental authorisation via the undertaking of a Basic Assessment process. The Basic Assessment will be inclusive of technical studies and public participation. The competent authority responsible for issuing environmental authorization is the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs. The application for environmental authorisation is for the following listed activities: Listing Notice 1 (GNR No. 327) Activity no. 24, 27 and 28.

Invitation to participate: Interested and Affected Parties are requested/invited to register with Green-Box Consulting.

Green-Box Consulting- P.O. Box 37738, Langenhovenpark 9330, Cell: 082 435 2108, e-mail: danie@green-box.co.za, **Date of notice placement:** 10 October 2022



Site notice 1: 27°48'39.07"S; 28°25'29.60"E



Site notice 1: 27°48'39.07"S; 28°25'29.60"E

ON-SITE NOTICE
NOTICE OF ENVIRONMENTAL APPLICATION
Residential development, Morgen 542, Reitz

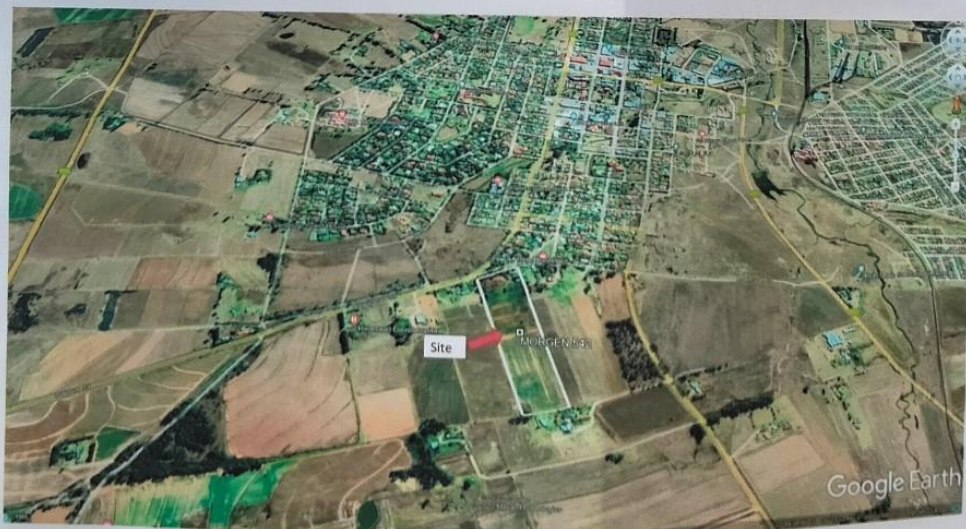
In terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended April 2017) published under the National Environmental Management Act, 1998 (Act No.107 of 1998) (NEMA), as amended, notice is hereby given of **Gert Track Familietrust** intention to obtain environmental authorisation for the development of residential units with associated infrastructure. Green-Box Consulting is appointed as the Environmental Assessment Practitioner.

Location of the proposed project: The land area earmarked for the facility is approximately 1.5km south of the Reitz CBD. The site is described as ~~the farm Morgen 542.~~

Environmental Authorisation: The project triggers activities listed in Listing 1, (GN R 327) of the 2014 EIA Regulations (as amended April 2017), published under NEMA and, therefore required environmental authorisation via the undertaking of a Basic Assessment process. The Basic Assessment will be inclusive of technical studies and public participation. The competent authority responsible for issuing environmental authorization is the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs. The application for environmental authorisation is for the following listed activities: Listing Notice 1 (GNR No. 327) Activity no. 24, 27 and 28.

Invitation to participate: Interested and Affected Parties are requested/invited to register with Green-Box Consulting.

Green-Box Consulting- P.O. Box 37738, Langenhovenpark 9330, Cell: 082 435 2108, e-mail: danie@green-box.co.za, **Date of notice placement:** 10 October 2022



Site notice 2: 27°48'30.85"S; 28°25'33.85"E



Site notice 2: 27°48'30.85"S; 28°25'33.85"E

Surrounding property owners:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Reitz Gastehuis	Neighbouring business	-
Riemland Dierehospitaal	Neighbouring business	0588633099
Claassen Creation	Neighbouring business	0795148370
Poelanies Guesthouse	Neighbouring business	0825646693

Government Sector departments:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	e-mail	Postal address
Nketoana Local Municipality	Lekgetho Mokgatlhe	058 863 2811	lekgetho.mokgatlhe.nketoana@fs.gov.za	P O Box 26, Reitz 9810
Thabo Mofutsanyane District Municipality	B.E Mzangwa	058 718 1000	mzangwa@tmdm.gov.za	Private Bag X810, Witsieshoek 9870
Department of Water and Sanitation-Free State	Mr. Nkhume Musekene	051 405 9281	MusekeneN2@dws.gov.za To CC: NtitiT@dws.gov.za KumaloZ@dws.gov.za MaseloaneK@dws.gov.za Mahlael@dws.gov.za LetloenyaneM@dws.gov.za LenongP@dws.gov.za	Bloem Plaza 2nd Floor, c/o Charlotte Maxeke & East Burger Street Bloemfontein 9300
Free State Department of Social Development	Ms L. Mnguni (Communications Officer)	0664739707	Lindiwe.Mnguni@fssocdev.gov.za	-
Nketoana Local Municipality- Ward 01 Councillor	Thabo Mokwena (Gert Mosia)	073 5428372 / 078 573 4508	mosiag@yahoo.com	-
Free State: Department of Public Works & Infrastructure	Mr. Mlungisi Maqubela (Head of Communications)	+27(0)51 492 3773	maqubelam@fsworks.gov.za	PO Box 960 Bloemfontein 9300

Draft BAR submitted for comments – 13 September to 13 October 2023

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'lekgetho.mokgat@fs.gov.za'

You forwarded this message on 13 Sep 2023 10:22.



Reply Reply All Forward ...
Wed 13 Sep 2023 09:50

Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



Local Municipality, Nketoana

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

Reply Reply All Forward ...
Wed 13 Sep 2023 09:53

DK Danie Krynauw <danie@green-box.co.za>
To 'mzangwa@tmdm.gov.za'



Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/sc/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



Thabo Mofutsanyane District Municipality

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'MusekeneN2@dws.gov.za'

Reply Reply All Forward ...
Wed 13 Sep 2023 09:55



Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27ft&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



Department of Water and Sanitation – Free State Office

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'Lindiwe.Mnguni@fssoedev.gov.za'

Reply Reply All Forward ...
Wed 13 Sep 2023 09:58



Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/sc/foqha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



Department of Social Development

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'mosiag@yahoo.com'

Reply Reply All Forward ...
Wed 13 Sep 2023 10:00

Councillor Letter.pdf
160 KB

Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/sc/fo/qha7hsud2to68dbfoa5v2/h?rkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)

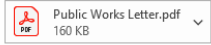


Nketoana Local Municipality- Ward 01 Councillor

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'maqubelam@fsworks.gov.za'

Reply Reply All Forward ...
Wed 13 Sep 2023 10:04



Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/sc/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

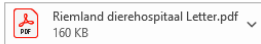
Danie Krynauw
Reg. EAP (EAPASA)



Department of Public Works and Infrastructure

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'murry.rdh@gmail.com'



Reply Reply All Forward ...
Wed 13 Sep 2023 10:15

Dear Interested and Affected Party

You have been identified as a neighbouring business that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



Riemland Dierhospitaal

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'mullerc@hotmail.com'

 Claassen Creations Letter.pdf
160 KB

[↩ Reply](#) [↶ Reply All](#) [→ Forward](#) [⋮](#)
Wed 13 Sep 2023 10:18

Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



GREEN-BOX
CONSULTING
INTEGRATED ENVIRONMENTAL MANAGEMENT

C 082 435 2108
E danie@green-box.co.za
W www.green-box.co.za

51 Wille du Plessis
Fichardtpark
Bloemfontein



Claassen Creations

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'info@poelanie.co.za'

Reply Reply All Forward ...
Wed 13 Sep 2023 10:22

Poelanies Guesthouse Letter.pdf
160 KB

Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



GREEN-BOX
CONSULTING
INTEGRATED ENVIRONMENTAL MANAGEMENT

C 082 435 2108
E danie@green-box.co.za
W www.green-box.co.za

51 Willie du Plessis
Fichardtpark
Bloemfontein



Poelanies Guesthouse

RE: Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

Reply Reply All Forward

Thu 14 Sep 2023 19:58



Danie Krynauw <danie@green-box.co.za>
To: 'Musekene Nkhumeleni'
Cc: 'Mabada Hangwani Donald (GAU)'; 'Mamabolo Mmamala Florah (GAU)'; 'Maseloane Kereemang'

Thankyou, Mr. Musekene

I will do so.

Regards

Danie Krynauw
Reg. EAP (EAPASA)



From: Musekene Nkhumeleni <MusekeneN2@dws.gov.za>
Sent: Thursday, September 14, 2023 11:22 AM
To: 'Danie Krynauw' <danie@green-box.co.za>
Cc: Mabada Hangwani Donald (GAU) <MabadaH@dws.gov.za>; Mamabolo Mmamala Florah (GAU) <MamaboloF@dws.gov.za>; Maseloane Kereemang <MaseloaneK@dws.gov.za>
Subject: FW: Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

Good day,

Please send the request for comments to DWS: Gauteng Regional office to the colleagues I have copied in this email (Ms Mabada and Ms Mamabolo). They are responsible for upper Vaal catchment in terms of water resources management.

Regards
Mr N Musekene
DWS: Free State

DWS

Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

DK Danie Krynauw <danie@green-box.co.za>
To 'mabada.h@dws.gov.za'

Reply Reply All Forward ...

Thu 14 Sep 2023 20:03



Dear Interested and Affected Party

You have been identified as an authority that has a commenting responsibility on the mentioned residential development proposal.

A copy of the Draft Basic Assessment Report and its annexures can be downloaded from the following the Dropbox Link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

Should you wish to comment on the report such should be sent to our Mr. Danie Krynauw (at the details below) before 13 October 2023. If not, please indicate that you have no comments.

For more information, please refer to the attached letter.

Should you have any queries on the above, please do not hesitate to contact the undersigned.

Yours sincerely

Danie Krynauw
Reg. EAP (EAPASA)



DWS, Gauteng Office



GREEN-BOX
CONSULTING

51 Willie du Plessis
Fichardtspark
Bloemfontein
9301

C 082 435 2108
E danie@green-box.co.za
info@green-box.co.za
W www.green-box.co.za

12 September 2023

Attention: B.E Mzangwa
Thabo Mofutsanyane District Municipality
Private Bag X810, Witsieshoek
9870
E-Mail: mzangwa@tmdm.gov.za

Dear Sir / Mam

Re: Request for comments - Draft Basic Assessment Report for the Proposed Vegetation Removal for a Residential Development on the Farm Morgen 542, Nketoana Local Municipality, Free State Province

Green - Box Consulting has been appointed by Gert Tack Familietrust to apply for environmental authorisation for a proposed residential development in Reitz. The development property is located on a smallholding named Morgen 542, situated directly south of Reitz town. The total area of Morgen 542 is approximately 8.69 hectare and can be accessed from Froneman Street.

As part of the public participation process, you have been identified as an authority that has a commenting responsibility on the proposal. We therefore hereby provide a Draft Basic Assessment Report for your comments and is in terms of the National Environmental Management Act, Act 107 of 1998 and the Environmental Impact Assessment Regulations of 2014 as amended.

To assist you in your review a copy of the report and its annexures is saved in a Drop Box folder. The folder can be accessed from the following link: <https://www.dropbox.com/scl/fo/qha7hsud2to68dbfoa5v2/h?rlkey=2kl575s6fhsy2j716epqn27lt&dl=0>

In terms of the current Regulations a 30-day commenting period is allowed. Should you have any project related queries, please do not hesitate to contact the undersigned.

Danie Krynauw
Reg. EAP EAPASA
Cell: 082 435 2108
E-mail: danie@green-box.co.za

INTEGRATED ENVIRONMENTAL MANAGEMENT

Letters sent to all Stakeholders to request comments on the submitted Draft BAR

Comments and Response report:

Authority/Organ of State	Contact person (Title, Name and Surname)	Comments	Response
Nketoana Local Municipality	Lekgetho Mokgatlhe	No comments received	No Response
Thabo Mofutsanyane District Municipality	B.E Mzangwa	No comments received	No Response
Department of Water and Sanitation-Free State	Mr. Nkhume Musekene	<p>Good day,</p> <p>Please send the request for comments to DWS: Gauteng Regional office to the colleagues I have copied in this email (Ms Mabada and Ms Mamabolo). They are responsible for upper Vaal catchment in terms of water resources management.</p> <p>Regards Mr N Musekene DWS: Free State</p>	Request for comments sent to DWS Gauteng on the 14 th of September 2023.
Department of Water and Sanitation-Free State	Ms Mabada and Ms Mamabolo	No comments received	No response
Free State Department of Social Development	Ms L. Mnguni (Communications Officer)	No comments received	No Response
Nketoana Local Municipality- Ward 01 Councillor	Thabo Mokwena (Gert Mosia)	No comments received	No Response
Free State: Department of Public Works & Infrastructure	Mr. Mlungisi Maqubela (Head of Communications)	No comments received	No Response

Appendix F: Impact Assessment

Impact Assessment Methodology

Table 1: Criteria used to determine the consequence of an impact

Rating	Definition of Rating	Score
A. Extent– the area over which the impact will be experienced		
Site	Within the construction site	1
Local	Within a radius of 2 km of the construction site	2
Regional	Provincial and parts of neighbouring provinces	3
National	The whole of South Africa	4
B. Intensity– the magnitude of the impact in relation to the sensitivity of the receiving environment, taking into account the degree to which the impact may cause irreplaceable loss of resources		
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2
High	Site-specific and wider natural and/or social functions or processes are severely altered	3
C. Duration– the timeframe over which the impact will be experienced and its reversibility		
Short-term	Up to 2 years and reversible	1
Medium-term	2 to 15 years and reversible	2
Long-term	More than 15 years and irreversible	3

The combined score of these three criteria corresponds to a *consequence rating*, as set out in Table 2.

Table 2: Method used to determine the consequence rating.

Combined score (A+B+C)	3-4	5	6	7	8-9
Consequence rating	Very Low	Low	Medium	High	Very High

Once the consequence is derived, the probability of the impact occurring is considered, using the probability classifications presented in Table 3 below.

Table 3: Probability classification

Probability – the likelihood of the impact occurring	
Improbable	<40% chance of occurring
Possible	40% - 70% chance of occurring
Probable	>70% - 90% chance of occurring
Definite	>90% chance of occurring

The overall significance of an impact is determined by considering the consequence rating and the probability classification using the rating system prescribed in Table 4 below.

Table 4: Impact significance rating

		Probability			
		Improbable	Possible	Probable	Definite
Consequence	Very Low	INSIGNIFICANT	INSIGNIFICANT	VERY LOW	VERY LOW
	Low	VERY LOW	VERY LOW	LOW	LOW
	Medium	LOW	LOW	MEDIUM	MEDIUM
	High	MEDIUM	MEDIUM	HIGH	HIGH
	Very High	HIGH	HIGH	VERY HIGH	VERY HIGH

Finally, the impact is also considered in terms of its status (positive or negative) and the confidence in the ascribed impact significance rating.

The prescribed system for considering impact status and confidence (in the assessment) is laid out in Table 5 below.

Table 5: Impact status and confidence classification

Status of Impact	
Indication whether the impact is adverse (negative) or beneficial (positive).	+ ve (positive – a ‘benefit’)
	– ve (negative – a ‘cost’)
Confidence in the assessment	
The degree of confidence in predictions based on available information, Green-Box Consulting judgment and/or specialist knowledge.	Low
	Medium
	High

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- **INSIGNIFICANT:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.
- **VERY LOW:** the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity/development.
- **LOW:** the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **MEDIUM:** the potential impact should influence the decision regarding the proposed activity/development.
- **HIGH:** the potential impact will affect the decision regarding the proposed activity/development.
- **VERY HIGH:** The proposed activity should only be approved under special circumstances.

Practicable mitigation and optimization measures are recommended, and impacts are rated in the prescribed way both without and with the assumed effective implementation of the recommended mitigation (and/or optimization) measures. Mitigation and optimization measures are either:

- **Essential:** measures that must be implemented and are non-negotiable; or
- **Best Practice:** recommended to comply with best practice, with adoption dependent on the proponent’s risk profile and commitment to adhere to best practice, and which must be shown to have been considered and sound reasons provided by the proponent if not implemented.

Impacts will then be collated into the EMPr and these will include the following:

- Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.
- Identifying negative impacts and prescribing mitigation measures to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
- Positive impacts will be identified and augmentation measures will be identified to potentially enhance positive impacts where possible.

Other aspects to be taken into consideration in the assessment of impact significance are:

- **Impacts will be evaluated for the construction and operation phases of the development. The assessment of impacts for the decommissioning phase will be brief, as there is limited understanding at this stage of what this might entail. The relevant rehabilitation guidelines and legal requirements applicable at the time will need to be applied;**
- **Impacts will be evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact;**
- **The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other facilities/projects which are either developed or in the process of being developed in the local area; and**
- **The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, national standards are to be used as a measure of the level of impact.**

Impact Significance Breakdown:

Impact Significance (Planning Phase):

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Environmental Legal and Policy compliance	Significance rating of impact		N/A	N/A
	Extent, Intensity, Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Bulk Services	Significance rating of impact		N/A	N/A
	Extent, Intensity, Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
No-go option	Significance rating of impact		N/A	N/A
	Extent, Intensity, Duration of impact	2;1;3		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Medium		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Impact Significance Rating (Construction Phase):

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Construction camp and construction activities	Significance rating of impact		N/A	N/A
	Extent, Intensity, Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Impacts on indigenous vegetation	Significance rating of impact		N/A	N/A
	Extent, Intensity, Duration of impact	1;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact		Cumulative Impact
Hydrological – Storm water System and water supply	Significance rating of impact		Significance rating of impact		N/A
	Extent, Intensity, Duration of impact	2;2;2	Extent, Intensity, Duration of impact	2;2;1	
	Consequence rating	Low	Consequence rating	Low	
	Probability of Impact Occurrence	Probable	Probability of Impact Occurrence	Possible	
	Impact Significance Rating prior to mitigation	Low	Impact Significance Rating prior to mitigation	Low	
	Status of impact (positive/negative)	Negative	Status of impact (positive/negative)	Negative	
	Confidence in the assessment	High	Confidence in the assessment	High	

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Waste – Sewage / Effluent	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Waste – Building Rubble & Littering	Significance rating of impact		N/A	N/A
	Duration of impact	1;1;1		
	Consequence rating	Very low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Very Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Land transformation – Dust Levels	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Land transformation – Noise Levels	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Increased levels of traffic	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Socio-economic (1)	Significance rating of impact		N/A	N/A
	Duration of impact	1;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Socio-economic (2)	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Positive		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
No-go option	Significance rating of impact		N/A	N/A
	Duration of impact	2;1;3		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Medium		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Impact Significance Rating (Operational Phase):

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Ecological impacts on Fauna and Flora	Significance rating of impact		N/A	N/A
	Duration of impact	1;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Very Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Hydrological – Storm water	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Waste – Domestic	Significance rating of impact		N/A	N/A
	Duration of impact	1;2;3		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Possible		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
Traffic Impact	Significance rating of impact		N/A	N/A
	Duration of impact	2;2;2		
	Consequence rating	Low		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Low		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Activity	Direct Impact		Indirect Impact	Cumulative Impact
No-gô	Significance rating of impact		N/A	N/A
	Duration of impact	2;1;3		
	Consequence rating	Medium		
	Probability of Impact Occurrence	Probable		
	Impact Significance Rating prior to mitigation	Medium		
	Status of impact (positive/negative)	Negative		
	Confidence in the assessment	High		

Appendix G: Environmental Management Programme (EMPr)

1. INTRODUCTION

The EMP has been developed to enable Gert Tack Familietrust to meet their environmental obligations in accordance with the National Environmental Management Act, Act 107 of 1998 as amended.

Green Box Consulting was appointed by the applicant, Gert Tack Familietrust, as the Independent Environmental Assessment Practitioner (EAP), to conduct the legally required Basic Assessment (BA) process. The project applicant proposes to formally develop a portion of land for residential purposes, directly adjacent south of the town of Reitz, Free State Province. The proposed development will entail formal construction of approximately 8.69 ha in size, for the proposed residential infrastructure.

The town forms part of the Nketoana Local Municipality which in turn, forms part of the Thabo Mufutsanyane District Municipality. The assessment area falls within the municipal urban edge. Access to the assessment area is obtained by way of Froneman Street, from the north.



Site map (Google Earth, 2023)

The proposed development plans to include the following:

- 🌿 7x 3000m² Residential stands
- 🌿 7x 1500m² Residential stands
- 🌿 10x 1000m² Residential stands
- 🌿 10x 800m² Residential stands
- 🌿 10x 20 units per hectare Townhouses
- 🌿 10x 40 units per hectare Townhouses
- 🌿 10x 40 units per hectare Townhouses
- 🌿 Internal roads and open spaces.

The environmental management plan provides systematic and explicit mitigation and monitoring measures for the proposed change of land use to accommodate the development. In this regard, the Construction EMP sets environmental targets for the contractor and reasonable standards against which the contractor's performance can be measured during construction. The EMP further enables authorities to check the practicability and likelihood of implementation of mitigation and monitoring measures.

2. OBJECTIVES OF THE EMP

The specific objectives of this EMP are to:

- To provide explicit operational guidelines and environmental monitoring requirements during the construction phases so that activities are done in environmentally responsible and sustainable manner.
- To benefit the host communities, minimise the impacts on the environment and to ensure the health and safety of the community by creating a development that eliminates unacceptable health hazards and ensures public and animal safety.
- To enable Gert Tack Familie Trust and its contractors to use resources efficiently and effectively during the project lifecycle in order to reduce wastage and thereby reduce associated negative environmental impacts. In addition, the aim is also to handle waste streams responsibly and apply the 'reduce, re-use and recycle' principle, wherever possible
- To leave areas disturbed by construction in a rehabilitated, stable, non-polluting and tidy condition.

3. ACTIVITIES COVERED BY THE EMP

3.1 PLANNING STAGE

The project planning stage consists of road designing, surveying, and ensuring that all plans and required contracts, permits/licenses and agreements are in place. No significant environmental impacts are expected at this stage.

3.2 CONSTRUCTION PHASE

The construction phase will start after the relevant authorizations are granted. The construction phase involves earthwork, existing housing shifting, superstructure development, service provision and finishing. The construction phase will start after the relevant authorizations are granted. This phase includes:

- Establishment of construction camp and equipment yards
- Transportation of construction material and other resource inputs,
- Use of heavy construction equipment on site.
- Storage of input materials and disposal of waste generated
- Construction of building structures
- Provision on ancillary service such as parking bays, connections to municipal water and sewer

Rehabilitation of the disturbed areas through:

- Demolition/Removal of any unwanted construction fences and infrastructure
- Top soiling and re-vegetation of areas disturbed by construction

4. ROLES AND RESPONSIBILITIES

A number of potential environmental impacts, mitigatory measures and environmental management controls are laid out in this document. The effective implementation of the EMP requires the involvement of several stakeholders, each fulfilling a different but vital role to ensure sound environmental management during the project life cycle. The key roles for the successful implementation of the mitigation of the project are those of the Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA), the applicant, the contractor, the independent environmental control officer, and the designate environmental control officer.

4.1 THE DEPARTMENT OF ECONOMIC, SMALL BUSINESS DEVELOPMENT, TOURISM AND ENVIRONMENTAL AFFAIRS

The Department is responsible for authorizing the EMP for the proposed development. The Department also has overall responsibility for ensuring that Gert Tack Familie Trust (the applicant) complies with the conditions of the EMP.

4.2 APPLICANT – Gert Tack Familie Trust

It is the responsibility of the project applicant – Gert Tack Familie Trust – to ensure that this EMP is fully implemented. The applicant shall ensure that competent people are employed on the project by its construction contractor. Where necessary a skills development program will be instituted to ensure that the required levels of competency are attained. Gert Tack Familie Trust should ensure that the selected contractor is able to adequately deal with the environmental challenges in this project.

4.3 CONTRACTOR

The Contractor refers to the team/company appointed by the Applicant to undertake the construction activities for the project. The Contractor shall have the following responsibilities:

- To implement all provisions of the EMP. If the Contractor encounters difficulties with specifications, he/she must discuss alternative approaches with Gert Tack Familie Trust or ECO prior to proceeding.
- To ensure that all staff and sub-contractors are familiar with the EMP and that duties and responsibilities of employees working on site include environmental responsibilities pertaining to the nature of their work.
- To make personnel aware of environmental issues and to ensure they show adequate consideration of the environmental aspects of the project.
- To report any incidents of non-compliance with the EMP to the ECO and project managers.

4.3.1 THE DESIGNATED ENVIRONMENTAL OFFICER (DEO)

The contractor is required to appoint a competent individual on-site as a Designated Environmental Officer (DEO). The DEO must be appropriately trained in environmental management and must possess the skills necessary to impart environmental management to all personnel involved during the operational phase. The DEO will be responsible for overseeing the internal compliance with the EMP requirements and ensuring that the environmental specifications are adhered to. The DEO must ensure that required Method Statement are in place and appoint or designate personnel for environmental management issues. The DEO will be responsible for training and for keeping detailed records of all site activities that may pertain to the environment associated with the project.

4.4 THE INDEPENDENT ENVIRONMENTAL CONTROL OFFICER (ECO)

In order to ensure compliance with this EMP during construction an independent Environmental Control Officer (ECO) must be appointed by Gert Tack Familie Trust to monitor the implementation of the recommendations made herein. The ECO must undertake monthly audits in respect of compliance with the EMP and report to Virtues Trust, the contractor and DESTEA if areas of non-conformance are identified. The ECO shall also advise Gert Tack Familie Trust and its contractors on any identified opportunities for improving environmental performance.

5. ENVIRONMENTAL MONITORING

The day-to-day monitoring and verification that the Construction EMP is being adhered to shall be undertaken by the Contractor and the DEO.

6. REVIEWING AND AUDITING

The contractor shall establish an internal review procedure to monitor the progress and implementation of the Construction EMP. Where necessary, and upon the recommendation of the ECO, procedures that require modification shall be changed to improve the efficiency of the Construction EMP. Any slight changes or adjustments to the Construction EMP shall be discussed with the ECO and documented. Significant modifications to the Construction EMP shall however need to be approved by Department of Environmental Affairs before the changes or adjustments to the EMP are implemented.

The ECO shall visit and audit the site once a month to ensure that correct operational procedures are being implemented and that the Contractor is complying with the environmental specifications in the Construction EMP. Additional site inspections by the ECO may be needed during the initial and final stages of the project. The ECO shall address any queries to the contractor and Virtues Trust. If the queries cannot be resolved at this level, if necessary, to DESTEA.

At the conclusion of the project an environmental performance report shall be compiled and submitted to DESTEA. This report shall be compiled by the ECO, in collaboration with the Contractor and Gert Tack Familie Trust and the project managers. It shall, as a minimum, outline the implementation of the Construction EMP, and highlight any problems and issues that arose during the construction period to report, on a formal basis, the lessons learned from the project.

7. NON-COMPLIANCE WITH THE EMP

Any non-compliance with the EMP will be treated as serious. Liability rests with Gert Tack Familie Trust and its contractors for non-compliance with the EMP. Work may be suspended by Gert Tack Familie Trust in part or all of the works during the construction phase if the Contractor fails to comply with the specifications set out in the EMP. Such suspension shall be enforced until compliance is achieved.

8. RECORD OF ACTIVITIES

The contractor shall keep a record of activities on site, including but not limited to the compliance with the Construction EMP. The records include but are not limited to:

- Environmental awareness and training records
- Details of inspections and audits conducted, and corrective action taken
- Details of complaints from interested and affected parties and responses provided
- Records of environmental measurements and monitoring done that is mentioned in the environmental monitoring program
- Internal and external meetings and reviews and any communication with authorities related to environmental management of the project
- Environmental incidents and accidents and action taken
- Photographic record of progress on site from an environmental perspective.
- Environmental Incidents and Accidents records

At the completion of the project, reports confirming compliance with various points identified in the environmental management programme will be submitted to the project proponent when the project ceases.

9. REPORT AVAILABILITY

Copies of this EMP shall be kept at the construction site office and will be accessible to all senior contract personnel. All senior personnel working on the project shall be required to familiarize themselves with the contents of this document.

10. ENVIRONMENTAL AWARENESS TRAINING

The successful implementation of the EMP is hinged on adequate environmental awareness training of employees. The workforce needs to understand their role in the achievement of the objectives specified in the EMP. All operational staff should be provided with environmental awareness training and employees who require specialized training in line with the nature of their job should be provided with such training. The training should include:

- Making employees aware that everyone has a right to a clean environment and that everyone has a responsibility to protect the environment.
- All employees must be made aware that no poaching, hunting, snaring or trapping of animals is allowed, within area or its boundary locations.
- Explanation of the importance of complying with the Construction EMP
- Discussion of the potential environmental impacts of construction activities and mitigation measures that must be implemented when carrying out activities.
- Explanation of the management structure of individuals responsible for matters pertaining to the Construction EMP.
- Employees' roles and responsibilities, including emergency preparedness.
- Explanation of the specifics of the Construction EMP and its specification.
- It is recommended that all a short induction lecture on environmental awareness be given to all contractors and causal workers covering the following topics.
 - Importance of water conservation and conservation techniques
 - Waste management
 - Dust management
 - Artifacts
 - Noise
 - Fires
 - Storage of hazardous materials
 - Importance of good house keeping
 - And emphasize importance of minimizing vegetation removal

The training should include showing the construction area, areas where vegetation clearance is not to be done, showing the personnel No-Go areas, locations for stockpiles and access roads to be used.

Training can be done either in a written or verbal format but will be in an appropriate format for the receiving audience. A record of people having been trained and the training done shall be kept.

11. ENVIRONMENTAL MITIGATION SPECIFICATIONS FOR IMPACTS

11.1 SOCIAL ENVIRONMENTAL ISSUES

It is important to minimize any negative perception, by taking proactive measures to prevent any social conflicts or social gaps and to develop a positive attitude within the community of the project. The following management strategies are to be implemented:

- Transparent fair recruitment and procurement practices. The contractor chosen should maximize the involvement of local communities in construction and support activities, to the extent possible, based on available skill levels. Whenever possible, training programmes that will benefit both construction stage skills requirements and long-term employment demand should be developed.
- The recruitment selection process should seek to promote gender equality and the employment of women wherever possible
- Priority should be given to the local suppliers of goods and services, which meet requirements of project procurement as far as is possible. In order to optimize the opportunities for local businesses to supply goods and services to the project, the contractor will do a survey of the capabilities of the goods and services that are locally available that are of an acceptable standard and quality and a

survey of the capabilities of local construction companies and identify opportunities for local suppliers.

- A public complaint registers and system to ensure that community complaints clearly investigated and adequate remedial taken should be instituted.
- Adequate notification should be done to people residing close to where construction activities are taking place especially if they are to be affected by them. In addition, there should be a system of compensation for any damages to infrastructure that may occur.
- Each worker should be required to abide by a Code of Conduct which will limit unsavoury activities in local towns and communities and restrict certain behaviours in the work sites and accommodation.

11.2 ESTABLISHING OFFICE / CAMP SITES

- The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation. No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.
- Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a firebreak shall be cleared around the perimeter of the camp and office sites.
- Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/tenant/persons lawfully living in the vicinity shall be kept to a minimum.
- Chemical toilet facilities or other approved toilet facilities should be sited in such a way that they do not cause water or other pollution. The use of existing facilities must take place in consultation with the landowner/tenant.
- In cases where facilities are linked to existing sewerage structures, all necessary regulatory requirements concerning construction and maintenance should be adhered to. The facilities must comply with water act requirements
- Adequate signage must be provided, and the area must be appropriated secured
- Adequate parking and security should be provided at the campsite

11.3 AIR QUALITY

The main sources of impact on air quality are mobilization of equipment, land clearing and earthworks. To ensure air quality characteristics of the project area are maintained near the baseline conditions during of the construction stage, the following measures shall be done:

- Regular inspection and scheduled maintenance of all equipment to ensure that construction vehicles are in good condition, are utilising fuel efficiently and do not smoke.
- Periodically watering the bare surfaces and excavations during construction to keep the dust level down.
- Slowing down the vehicles carrying the construction materials to reduce dust generation.
- Properly wrapping the material truck containers with cover to avoid dust spreads on windy days and prohibiting transport of over loaded trucks.
- Providing and using the safety equipment such as dust mask, noise cover for employees who work near the dusty location such as the heavy equipment operators
- Optimization of working schedule and work to help to minimize several material vehicle mobilization trips.

11.4 NOISE AND VIBRATIONS

The primary noise sources will be vehicles and equipment utilized during the construction stage including graders, bulldozers, general purpose vehicles, etc. To manage the impact the following will be done:

- Working schedule for the activities with high noise level will be arranged between 08:00 AM to 17:00 PM.
- Only well-maintained vehicles and equipment should be operated onsite, and all machinery should be serviced regularly during the construction stage.
- Avoiding unnecessary simultaneous noisy activities.
- No amplified music shall be allowed at the site.
- Selecting 'quiet' construction equipment and working method and avoiding unnecessary revving and hooting.
- Providing ear protection for activities that are likely to create noise in order to protect worker's health and safety.

11.5 EROSION CONTROL

Construction activities will require the removal of vegetation cover, potentially resulting in soil erosion and subsequent impacts on surface water quality due to uncontrolled rainwater run-off or mechanical/wind action. The following measures are necessary to minimize impacts.

- Clearance of vegetation should be restricted to the absolute minimum required to facilitate construction activities to proceed. No protected plant species shall be removed without a permit. Disturbance of topsoil and vegetation rootstock must be minimized as far as possible.
- Appropriate drainage systems will be built to accommodate the surface water movement from the rain and wind.
- Construction activities shall take place only within the approved demarcated area. Appropriate drainage facilities must be constructed to make sure water runs smoothly downstream.
- Topsoil layer will be kept to rehabilitate and will be adequately stored to protect it from erosion.
- Areas where construction has been finished should immediately be re-vegetated.

11.6 CONTAMINATION OF LAND

Land contamination may occur as a result of fuel and oil leaks or spills and/or poor fuel, chemical and waste storage.

- The storage areas shall be securely fenced and secured and appropriately marked to indicate the goods in the storage. Material Safety Data Sheets should be kept for all hazardous materials on site.
- All hazardous substances and stocks such as diesel, oils, detergents, etc., shall be stored in areas with impervious flooring such as concrete and properly bunded. Drip pans, other impervious surface, shall be installed in such storage areas with a view to prevent soil and water pollution.
- Dedicated impervious areas should be designated for concrete mixing and the spillage from concrete mixed should be cleaned immediately.
- The waste management strategy on the construction site should be hinged on the waste hierarchy model of 'reduce, reuse and recycle' waste in order to reduce the ultimate impact on the environment.
- All used oils, grease or hydraulic fluids shall be placed in appropriate impervious containers and these receptacles will be removed from the site on a regular basis for disposal at a licensed disposal facility or sent for recycling/reuse with a registered facility.
- Residues from machinery maintenance and other sources contaminated with hazardous waste should be stored in proper containers that avoid seepage to ground.
- Spills should be cleaned up immediately by removing the spillage together with the polluted soil and by disposing of them at a recognised facility. In areas where the spills are some, an absorbent agent can be used, and the area treated in situ
- Adequate waste receptacles shall be made available, and all waste shall be adequately stored so that it does not pose a pollution risk. General waste is to be disposed of through the municipal service. Any other waste will be disposed of through only licensed waste disposal facilities.

11.7 SURFACE WATER QUALITY

Poor chemical storage and poor waste management practices may lead to the contamination of water sources. Sewage and sanitary effluent have the potential to adversely affect the quality of receiving water bodies unless properly managed. To eliminate the risk of contamination the following measures have to be instituted.

- Chemical toilets shall be used during the construction stage and a registered service provider shall be contracted to service the toilets regularly
- Suitable covered receptacles for waste shall be available at all times and conveniently placed for the disposal of waste.
- Warehouse floors and workshop areas should be of concrete. Drainage from warehouse is collected separately with trap for oil or fuels oil. Trap containers when full will be removed properly stored and sent out to oil waste management company.
- Refuelling, fuel loading/unloading, oil change-outs, waste storage and disposal activities must be carefully managed to prevent spillages
- Adequate toilets must be available on site for use by construction staff at all times. The digging of pit latrines for this purpose is not allowed under any circumstances. Should chemical toilets be used, an appropriate contractor must be employed to service these facilities on an ongoing basis.
- Spills or overflows from chemical or other toilets used by construction staff must be dealt with by a sanitation expert immediately.
- Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and treated prior to discharge or removed from the site for appropriate disposal at a recognised facility.

11.8 WATER USAGE

12.

- Any water that is used which does not emanate from Municipality supplies must be registered and authorised by the Department of Water Affairs prior to usage commencement
- The contractor shall promote responsible water use by all personnel.
- Ponding rainfall must be accommodated by formal systems developed by the contractor during the entire construction phase, as per relevant building guidelines and regulations.

11.9 FAUNA AND FLORA

Fauna and flora are negatively impacted by the clearance of vegetation, noise from construction activities (disturbance) and gathering/ hunting of flora and fauna by workers. The following measures are necessary to mitigate impacts.

- Clearance of vegetation should be restricted to the absolute minimum required to facilitate access and undertaken construction activities.
- Topsoil shall be removed and kept for use during rehabilitation.
- The Contractor shall be responsible for the removal of alien vegetation within areas affected by the construction activities including cleared ground and topsoil stockpiles. Equipment used should be regularly washed down to avoid transporting seeds (invasive species) or plant diseases.
- No protected or endangered plant species shall be removed without a permit or license.
- No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.
- The rehabilitation activities require the re-planting of vegetation in any areas cleared for the construction activities. This will promote soil stability, improve the visual environment and provide faunal habitat.
- Hunting/gathering by construction workers must not be permitted.
- Localized habitat features such as nests, dens or burrow sites should be avoided as much as possible. In addition, care should be taken in working in areas of active nesting, spawning, and feeding areas.

11.10 SAFETY

- The Contractor shall be responsible for the protection of the public and public property from any dangers associated with the construction and operation of the road activities,
- All work should be handled in accordance with the Occupational Health and Safety Act and adequate safety precautions taken and suitable sanitation facilities provided in line with the requirements of the act. It is the duty of the contractor to ensure that all protective measures against accidents are done.
- Any works/activities which may pose a hazard to humans and/or domestic animals are to be protected or cordoned off and, if appropriate, warning signage erected
- Appropriate security is to be provided at the site to protect equipment and provide for a safe construction site and works areas.
- Any damage caused because of the construction activities shall be repaired to the satisfaction of the project manager and owner.

11.11 HISTORICAL ARCHEOLOGICAL AND HERITAGE IMPACTS

- Should any cultural or archaeological artefacts be found during operational activities, operations must cease immediately, and the area secured and SAPS, McGregor Museum and the South African Heritage Resources Agency and other relevant authorities informed immediately.
- No site of archaeological or historical significance may be moved without a permit from the SAHRA. Any permitted removal of any archaeological or historical matter must be done under the strict supervision of a qualified registered archaeologist.

13. REHABILITATION

- On completion of operations, all buildings, structures or objects on the camp/office site shall be demolished and removed.
- Where office/camp sites have been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.
- On completion of operations, the areas shall be cleared of any contaminated soil, which must be dumped as per the waste management plan
- All infrastructure, equipment, plant, temporary housing and roads and other items used during the construction period will be removed from the site
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the area and disposed of at a registered waste disposal facility. It will not be permitted to be buried or burned on the site
- Disturbed areas should be left in a safe and stable manner. Preventative measures may be necessary to construct adequate drainage structures including ditches and other structures to facilitate the movement of surface water.
- Photographs of the camp and office sites, before and during the construction and after rehabilitation, shall be taken at selected fixed points and kept on record.
- The disturbed surfaces shall then be ripped or ploughed and the topsoil previously stored shall be spread evenly to its original depth over the whole area. The area shall then be fertilised if necessary (based on a soil analysis).
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the might need that the soil be analysed and any deleterious effects on the soil arising from the construction operation be corrected and the area be seeded with a seed mix to his or her specification.

13 HANDLING OF EMERGENCIES

- The contractor should identify all situations that can lead to emergency situations and provide response strategies. The situations should include fire and major chemical spill.
- Contact details of all departments/service providers to be contacted in case of an emergency shall be made available to employees.
- Equipment for dealing with emergencies such as spill kits, firefighting equipment, first aid boxes etc shall be made available and personnel properly trained in its use.
- All staff on site should be trained on how to handle emergency situations and emergency drills/rehearsals should be conducted periodically to ensure that staff prepared.

14 METHOD STATEMENTS

The Contractor shall submit written Method Statements to for all environmentally sensitive aspects of the work. It should be noted that Method Statements must contain sufficient information and detail to mitigate the potential impacts of the works on the environment. The Contractor will also need to thoroughly understand what is required of him / her in order to undertake the works. Work shall not commence until Method Statements are in place.

Appendix H: Details of EAP and expertise

DETAILS OF PERSON PREPAIRING THE BAR AND EMP

REPORT PREPARED BY: Danie Krynauw and Charissa Worthmann

CONTACT DETAILS: Email: danie@green-box.co.za
Email: charissa@green-box.co.za

ENVIRONMENTAL CONSULTING COMPANY: Green Box Consulting
P.O. Box 37738
Langenhovenpark
Tel: 083 412 1705 / 082 435 2108

QUALIFICATIONS OF EAPs: Danie Krynauw has a master's degree in Town and Regional Planning (UFS) and completing his dissertation to obtain a master's degree in Environmental Management (UFS). D. Krynauw has over 20 years' experience in the environmental management field. He is registered with EAPASA (2019/1348) and is a member of the International Association of Impact Assessments South Africa.

Charissa Worthmann has a PG. Dip in Integrated Water Management (*cum laude*) (UFS) and a master's degree in Environmental Management (*cum laude*) (UFS) and is a member of the International Association of Impact Assessments South Africa and the Ground Water Division of GSSA.

CURRICULUM VITAE – DANIE KRYNAUW

1. Family name: Krynauw
2. First name: Daniël
3. Date of birth: 14/12/1971
4. Nationality: South African
5. Contacts: Cell: 082 435 2108
Email: danie@green-box.co.za

6. Education:

Institution	Degree(s) or Diploma(s) obtained
University of the Free State 2001 – 2002	Master in Environmental Management – Dissertation pending
University of the Free State 1996 – 1998	Masters in Urban and Regional Planning
University of the Free State 1993 – 1995	BA Geography and Sociology

7. Membership of professional bodies:

- EAPASA – 2019/1348
- International Association of Impact Assessment South Africa (IAIAsa)

8. Present position:

- Environmental Scientist / Director – Green-Box Consulting

9. Current Responsibilities:

- Liaising with clients in both the private and public sectors.
- Conduct Environmental Impact Assessments and other Environmental Technical Investigations.
- Apply and obtain waste licenses, water licenses, mining permits and environmental authorisations for clients.
- Use different GIS datasets in order to create new information or investigate patterns for projects.
- Conduct environmental compliance and other environmental audits.
- Provide technical-level support for environmental remediation and mitigation projects, including remediation system design and determination of regulatory applicability for incoming projects.
- Collaborate with other environmental scientists, planners, engineers, and other specialists, and experts in law and business etc. to address environmental problems for clients.
- Conduct Environmental training.

10. Years within the organization:

- 13 years

11. Other skills (e.g. computer literacy, etc.):

- All suits of Microsoft Office, Arc View, ReGIS, and Project Professional.

12. Professional experience:

Date	2011 – Current
Organisation	Green-Box Consulting (Environmental Consultants)
Position	Environmental Scientist (Owner and Director)

Date	2009 – 2016
Organisation	Terra Works Environmental Consultants
Position	Senior Environmental Scientist and COO

Date	2001 – 2009
Organisation	Department of Economic Development, Tourism and Environmental Affairs, Free State
Position	Principal Environmental Officer
Description of duties	<ul style="list-style-type: none">• Review Environmental Impact Assessments• Review Environmental Management Programmes• Issuing Environmental Authorisations

CURRICULUM VITAE – CHARISSA WORTHMANN

1. Family name: Worthmann
2. First name: Charissa
3. Nationality: South African
4. Contacts: Cell: 082 838 5062
Email: charissa@green-box.co.za

6. Education:

Institution	Degree(s) or Diploma(s) obtained
University of the Free State 2018	Post Graduate Diploma in Integrated Water Resource Management (<i>cum laude</i>)
Goethe Institut 2018	German B1 Certification
University of the Free State 2019-2020	Master of Environmental Management [with Specialization in Biodiversity and Conservation Science] (<i>cum laude</i>)
South African Certification and Auditing Services 2021	ISO 14001:2015 Implementation & Facilitation

7. Membership of professional bodies:

- International Association of Impact Assessment South Africa (IAIASa)
- Ground Water Division

8. Present position:

- Environmental Scientist / Junior Consultant– Green-Box Consulting

9. Current Responsibilities:

- Assist with the information to conduct Environmental Impact Assessments and other Environmental Technical Investigations.
- Apply and obtain waste licenses, water licenses, mining permits and environmental authorisations for clients.
- Use different GIS datasets in order to create new information or investigate patterns for projects.

10. Years within the organization:

- 3 years

11. Other skills (e.g. computer literacy, etc.):

- All suits of Microsoft Office, QGIS, and Project Professional
- Fluent in German with B1 level certification

12. Professional experience:

Date	2020-Present
Organisation	Green-Box Consulting (Environmental Consultants)
Position	Environmental Scientist & Junior Consultant

Date	2021-2022
Organisation	Free State Branch of the Botanical Society of South Africa
Position	Committee Member

Date	2020-2021
Organisation	University of the Free State
Position	Graduate Research Assistant
	Research assistance surrounding groundwater management and unconventional oil and gas development

Date	2016
Organisation	University of the Free State
Position	Research Assistant
Description of duties	General research assistance

13. Publications

- UFS Master's Thesis 2021
- Poster presentation at the 2021 Groundwater Division 17th Biennial Conference: <https://gwd.org.za/news-articles/2021-gwd-17th-biennial-conference-and-exhibition-debrief>
- Worthmann, Charissa., and Esterhuyse, Surina. 2022. A mobile application to protect groundwater during unconventional oil and gas extraction. *R. Soc. open sci.* 9220221220221. <http://doi.org/10.1098/rsos.220221>
- <https://climatebiz.com/author/charissa/>

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information

1. DFFE Screening Tool Report