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# DRAFT BASIC ASSESSMENT

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## The proposed construction of a truck stop on part of portion 5 of the Farm Avenham 2187, Bloemfontein

**Applicant:** Mr. André Smith  
**MDA Ref No:** 40716  
**Date:** August 2017



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**destea**

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

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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 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 **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
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.

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"JWALE KE NAKO YA KOTULO, RE A KUBELETSA"

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?  NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

**1. PROJECT DESCRIPTION****a) Describe the project associated with the listed activities applied for**

The proposed project entails the construction of a diesel depot, truck stop and associated infrastructures on a portion of Portion 5 of the farm Avenham 2187, Bloemfontein.

**Background to the proposed project:**

The diesel depot has been in existence adjacent to the N1 for many years on Portion 7 of the Farm Avenham 2187. The operator rented the area used for the diesel depot, but as the owner no longer want to rent the area out, the operator bought the adjacent portion, namely Portion 5 of Avenham 2187 and it is proposed to basically relocate the existing facilities to the new site. The applicant has various contracts with many transport companies and can sell the product for a better price than the usual market. It is therefore compulsory for trucks of the account holders to make use of a specific Diesel Depot(s). The fuel will be stored in above ground tanks.

The relocation of the facility will not have a significant impact on traffic volumes.

Although the facility will be more attractive, visibility from the N1 will decrease.

As far as the overnight facilities are concerned, these will mostly be used by the existing clients and are not expected to generate considerably more trips. The time when trips are made might however change as trucks normally stop to overnight between 19:00 and 21:00 and depart between 5:00 and 7:00. As traffic volumes at the interchange are low, a change in traffic patterns will not have a significant impact on traffic conditions, especially not considering the time when the trucks will arrive and leave the truck stop.

The proposed project entails the translocation from the existing premises to the newly proposed premises on Portion 5 of the farm Avenham, Bloemfontein. The newly proposed site also offers adequate space to

provide overnight parking bays for at least 150 trucks and wash bays. It is also suggested that a workshop for trucks be constructed. A convenience store, restaurant and take-away facilities are also a possibility.

It is anticipated that the applicant store between 80 000 and 500 000 litres of fuel per given interval on site.

The proposed site is an ideal location, as the N1 makes an off ramp that leads right to the business and customer can easily reach the business without any hassle. In addition, due to the historic land use the site is in a degraded condition and the natural vegetation composition has been transformed to a large degree. The proposed new site was previously utilised as a crocodile farm and the structures and infrastructure associated with it, is still present on the site. Wastes such as scrap metal, construction materials and skeletal remains of crocodile food are littered around the site. Overgrazing is considered relatively high, but this may also have been caused by human activities on the site.

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

Listed activity as described in GN 983,984 and 985	Description of project activity
<b>Example:</b> <b>GN 983 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</b>	<b>A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river</b>
Regulation 983, BAR, Activity 24, as amended: The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	Between 80 000 and 500 000 litres of fuel will be stored on site during the operational phase of the proposed project.
Regulation 983, BAR, Activity 27, as amended: The clearance of an area of 1	More than 1 ha of indigenous vegetation will be cleared during the construction phase.

<p>hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>	
<p>Regulation 983, BAR, Activity 22, as amended:</p> <p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:</p> <p>(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</p> <p>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</p>	<p>The area to be developed will be larger than 5 ha and will be located inside an urban area. Please refer to Annexure A for more information on the proposed site locality.</p>

## 2. FEASIBLE AND REASONABLE ALTERNATIVES

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

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

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h) of GN 982, Regulation 2014. Alternatives should include a consideration of all possible means by which the

purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

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

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

NOTE: Please take note of the description of the preferred as well as alternatives investigated:

**Alternative 1** Preferred:

The proposed site is favourably positioned in terms of the N1 and the City of Bloemfontein. Bloemfontein is geographically the connecting point between destinations and is centrally located and is therefore a preferred stop-over destination for trucks / travellers between destinations such as Johannesburg to Cape Town / Port Elizabeth / East London or George and Durban to Port Elizabeth / East London / George or Cape Town. The main aim of the proposed project is to fulfil in the growing need of the South African transport industry by providing a reliable fuel station as well as to contribute in helping the previously disadvantaged by creating employment opportunities.

**Alternative 2** Locality:

The construction of a truck shop at another site, in industrial part of Bloemfontein.

This option was not seen as a viable / reasonable alternative due to the following:

- the truck stop should ideally be located nearby the N1, as the trucks that will use the truck stop usually do not want to drive through town, due to their large size
- the applicant owns the property, and therefore it will not be economically viable to buy other property

**Alternative 3** Type and Technology:

No type and technology alternatives were investigated.

**Alternative 4** Design and Layout:

The existing structures at the proposed site were kept in mind during the investigation of alternative design and layout options. Therefore, no design and layout options can be seen as reasonable and / or feasible alternatives.

**No-go alternative:**

The no-go option means keeping the status quo, i.e. not construct the proposed truck stop. There is currently a high demand in providing safe overnight parking bays for trucks in the Bloemfontein area. The proposed project will provide overnight parking bays for approximately 150 trucks per day. Therefore, this option is not recommended.

**a) Site alternatives**

<b>Alternative 1 Preferred</b>		
Description	Lat (DDMMSS)	Long (DDMMSS)
The proposed project entails the construction of a truck stop and associated infrastructures on a portion of Portion 5 of the farm Avenham 2187, Bloemfontein.	28°59'53.89"S	26°16'12.99"E
<b>Alternative 2 Locality</b>		
Description	Lat (DDMMSS)	Long (DDMMSS)
The construction of a truck shop at another site, in industrial part of Bloemfontein. This option was not seen as a viable / reasonable alternative due to the following: - the truck stop should ideally be located nearby the N1, as the trucks that will use the truck stop usually do not want to drive through town, due to their large size - the applicant owns the property, and therefore it will not be economically viable to buy other property	N/A	N/A

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**

<b>Alternative 1 Preferred</b>
Description
The location of the proposed infrastructure is determined by the existing infrastructure on site. The construction of new infrastructure in corporation with the existing infrastructure is a cost effective solution and many of the



existing infrastructure can be incorporated in the proposed new development. Please refer to Annexure A for more information.

**Alternative 4** Design and Layout:

**Description**

The existing structures at the proposed site were kept in mind during the investigation of alternative design and layout options. Therefore, no design and layout options can be seen as reasonable and / or feasible alternatives.

**c) Technology alternatives**

**Alternative 1 Preferred**

Construction of 5 x 83 000L tanks will be undertaken.

**Alternative 3** Type and Technology

The applicant considered the construction of 3 x 110 000L tanks as it will be more financial viable than the construction of 5 x 83 000L tanks. However, the applicant indicated that the construction of the 83 000L tanks is the best option, to limit the possibility of spillages and pollution due to possible leakages.

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

**Alternative 1 (preferred alternative)**

<b>Alternative 1 (preferred alternative)</b>		
<b>Alternative 2</b>		
<b>Alternative 3</b>		

**e) No-go alternative**

The no-go option means keeping the status quo, i.e. not construct the proposed truck stop. There is currently a high demand in providing safe overnight parking bays for trucks in the Bloemfontein area. The proposed project will provide overnight parking bays for approximately 150 trucks per day. Therefore, this option is not recommended.

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

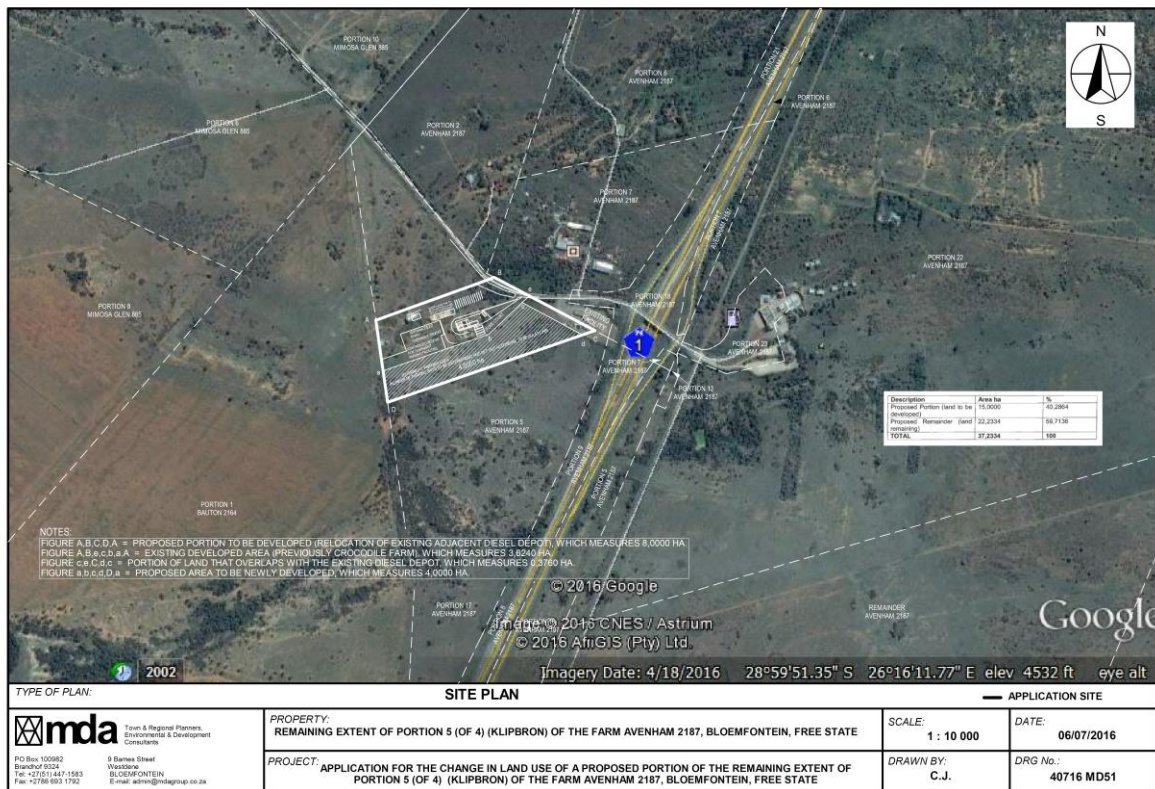
3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:  
Alternative 1 Preferred

Size of the activity:

The proposed project will consist of an area covering approximately 8 ha (80 000m<sup>2</sup>), of which 4 ha (40 000m<sup>2</sup>) is already developed. Please refer to the figure below.



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

**Alternative:**

Alternative 1 (Preferred)

**Size of the site/servitude:**

The proposed project will be located on a portion of Portion 5 of the farm Avenham. Portion 5 of the farm Avenham consist of 372 334 m<sup>2</sup>

**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

Describe the type of access road planned:

The existing dirt road will be used to gain access to the site during the construction phase. Ideally the portion of the A194 road to be used by trucks should be paved to reduce road maintenance, restrict dust and to enable construction of a formal access in such manner that the left-in access is not misused by vehicles as an exit. It is not anticipated that the relocation of the facility as planned will have a significant impact on trip generation and traffic flow in the area. The location of access is important to ensure acceptable sight distances. The proposed relocation of access to the west is an improvement on the current spacing.

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

**5. LOCALITY MAP**

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);

- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

## 6. LAYOUT/ROUTE PLAN

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

The site or route plans must indicate the following:

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

## 7. SENSITIVITY MAP

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

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

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

## 8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to

this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

## 9. FACILITY ILLUSTRATION

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

## 10. ACTIVITY MOTIVATION

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

<b>1. Is the activity permitted in terms of the property's existing land use rights?</b>		NO	
As the property does not fall within the Bloemfontein Town Planning Scheme, an application for change in land use for a portion of agricultural land from agriculture to "truck stop, diesel depot and associated amenities" was submitted.			
<b>2. Will the activity be in line with the following?</b>			
<b>(a) Provincial Spatial Development Framework (PSDF)</b>		NO	
Although the proposed activity is not in line with the PSDF, the proposed activities will not have a negative influence on the value of the adjacent property. In addition, the proposed project will have a positive impact on the socio-economic value, due to the fact that 16 persons will be employed during the operational phase.			
<b>(b) Urban edge / Edge of Built environment for the area</b>		NO	
The Proposed Portion is not included in the "Urban Edge" of/or the Spatial Development Framework (SDF) of the Mangaung Metro Municipality and is not included in the jurisdiction area of a Town Planning Scheme/Land Use Scheme. Hence, the property is perceived as being agricultural land and although the property falls under the jurisdiction of the Department Agriculture, Forestry and Fisheries, the controlling authority is the Mangaung Metro Municipality. A Town Planning application was submitted in terms of the Spatial Planning and Land Use Management Act, 16 of 2013 (Act No. 16 of 2013) (SPLUMA). Although the proposed locality for the proposed activity is outside of the urban edge, the proposed activities will not have a negative influence on the value of the adjacent property. In addition, the proposed project will have a positive impact on the socio-economic value, due to the fact that 16 persons will be employed during the operational phase.			

<b>(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?).</b>		NO	
<p>The proposed project is not in line with the IDP or SDF of Mangaung Metropolitan Municipality. However, the proposed project will have many benefits, such as:</p> <ul style="list-style-type: none"> <li>- safe place for truck drivers to overnight, without travelling many kilometres out of their pick-up and delivery way</li> <li>- fuel depot for trucks as well as general vehicles</li> <li>- restaurant / shop</li> <li>- ablution facilities</li> <li>- wash-bay</li> </ul>			
<b>(d) Approved Structure Plan of the Municipality</b>		NO	
<p>Although the proposed project was not presented to MMM, it is believed that the proposed project will be beneficial to MMM, as explained above.</p>			
<b>(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?)</b>		YES	
<p>The proposed project will not compromise the integrity of the existing environmental management priorities for the area, should the contractors adhere to the conditions stipulated in this report, additional specifications to be provided, the EMPr as well as best practices.</p> <p>Specific measures to be implemented will include, but not limited to:</p> <ul style="list-style-type: none"> <li>- Stormwater measures</li> <li>- Erosion control</li> <li>- Limiting the removal of vegetation</li> <li>- Limiting the formation of dust</li> <li>- Monitoring groundwater and surface water for possible contamination thereof due to operational activities (especially at the fuel tanks)</li> <li>- Etc.</li> </ul> <p>Refer to the EMPr for more information on measures to be implemented.</p>			
<b>(f) Any other Plans (e.g. Guide Plan)</b>	YES	NO	Please explain
N/A			

<p><b>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)?</b></p>		NO	
<p>As the property does not fall within the Bloemfontein Town Planning Scheme, an application for change in land use for a portion of agricultural land from agriculture to “truck stop, diesel depot and associated amenities” was submitted.</p>			

<p><b>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.)</b></p>	YES		
<ul style="list-style-type: none"> <li>• Truck accidents have been at the centre of public fury for years. Road carnage in South Africa is caused by human, vehicle and road factors, of which the human factor is by far the highest. An individual's ability to hear, see, evaluate and react to information influences traffic safety. The road freight industry in South Africa is huge and one of the human factors that increase the likelihood of accidents when travelling is fatigue. Driver rest periods are therefore important as the drivers of trucks usually drives alone and without company to help keep them awake. Motorists and especially truck drivers should be educated about the importance of regular stops on long-distance trips. This application will provide the necessary facilities for stop-overs for trucks with the necessary amenities and which is centrally located and is therefore a preferred stop-over destination for trucks / travellers between destinations. Statistics suggest that truck-driver fatigue may be a contributing factor with regards to heavy-truck accidents. Conversely, educating the public (especially heavy duty truck drivers) about the importance of resting periodically during long-distance trips and the provision of shower facilities at stops and filling stations along national routes (N1) for long distance truck drivers can reduce heavy-truck accidents. This notion should be applied nationally to reduce the incidences of heavy-truck accidents in all provinces. The fatality rate is also highest after dark. The proposed project will thus have a positive effect in reducing accidents on the road and thereby serve the public interest.</li> <li>• The development will benefit the local community through employment opportunities</li> <li>• In addition, a fuelling station in close proximity to the local community will be available</li> </ul>			



<b>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.)</b>		NO	
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**Water supply:** Potable water will be provided from boreholes on portion 5 of the farm Avenham 2187.

**Electricity supply:** Electricity is available on site. No extra work is required to ensure a secure supply to the proposed development.

**Sewerage and waste water:** Sewage and waste water will be collected in Septic Tanks.

**Storm water:** The site will be properly sloped in order to allow the storm water to drain towards the south-west area of the site.

**Road network:** Safe access is possible from the R194.

The property falls within the Eskom supply area. At present there is an active 100 kVA, 400 volt Eskom supply point on the property. The owner and developer of the truck stop and diesel depot, Mr. Andre Smith, indicated that the existing supply will have sufficient capacity for the new development as is. It will also not be required to move the supply point to a more favourable location. The existing supply point is in the process to be transferred to Mr Smith [Trustee of the Anchor Family Trust (i.e. the applicant)]. The Eskom account number is 7511504386 and the pole designation is GSP 287/36/116/197/96/3. Therefore, no extra work is required to ensure a secure supply for the new development. The LV reticulation, beyond the Eskom supply point, will be done by the developer and will have to meet the National and Eskom requirements as prescribed (SANS 10142-1).

Potable water is to be provided from two existing boreholes (borehole 1: 5000e /h and borehole 2: 1500e/h). The proposed development can be provided with potable water from the two existing boreholes. Two storage tanks currently service the existing infrastructure (2 x 5000e, 2 x 10 000e and a dam with the capacity of 150 000e. The proposed storage requirements will be met by the existing water storage facilities on site.

Note that the bulk service report recommended that a separate tank with the capacity of 24 000e with a booster pump that can deliver 20e/s be constructed for a fire flow network.

Mangaung Metropolitan Municipality: Roads and Stormwater Division mentioned that the stormwater is adequately addressed in the services report and the developer will be responsible to provide a retention facility (dam) to address the increased stormwater during peak times.

See Appendix J<sub>1</sub> for proof of consultation with Mangaung Metropolitan Municipality.

<p><b>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.)</b></p>		NO	
<p>Although the proposed activity on the proposed site is not provided for in the infrastructure planning of the municipality, one should keep in mind that the proposed project can be seen as the translocation of the existing Diesel Depot on portion 7 of the farm Avenham, to portion 5 of the farm Avenham. Therefore, the proposed project will not have a significant impact on the infrastructure planning of the municipality.</p>			
<p><b>7. Is this project part of a national programme to address an issue of national concern or importance?</b></p>		NO	
<p>Although the project does not form part of any national programme to address an issue of national concern, truck drivers (north and south of the N1) will be able to fill their trucks with fuel, eat, repair their trucks (if needed) as well as overnight at the proposed truck stop.</p>			
<p><b>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.)</b></p>	YES		
<p>The proposed site is adjacent to the N1 that is used by various truck drivers. As the property does not fall within the Bloemfontein Town Planning Scheme, an application for change in land use for a portion of agricultural land from agriculture to "truck stop, diesel depot and associated amenities" was submitted.</p>			
<p><b>9. Is the development the best practicable environmental option for this land/site?</b></p>	YES		
<p>The site is currently in a degraded state, with barren areas and waste. The applicant will implement best environmental practices should the project be authorised by DESTEA, and therefore the existing waste will be removed from site and natural vegetative growth will be encouraged, where possible.</p>			

<b>10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?</b>	YES		
<p><b>Negative:</b></p> <ul style="list-style-type: none"> <li>• Vegetation loss;</li> <li>• Possible erosion;</li> <li>• Possible soil and groundwater pollution.</li> </ul> <p><b>Positive:</b></p> <ul style="list-style-type: none"> <li>• Employment opportunities;</li> <li>• Rehabilitation of site (currently in a degraded state due to vegetation loss; Over grazing and occurrence of various waste types on the property);</li> <li>• Removal of various alien vegetation species.</li> </ul>			
<b>11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?</b>		NO	
<p>It is suggested that future (similar) projects will also:</p> <ul style="list-style-type: none"> <li>• Be located adjacent to a highway / national road</li> <li>• Constructed in such a way that no surface water bodies will be impacted upon</li> <li>• Established on a site that is already disturbed, where possible</li> </ul>			
<b>12. Will any person's rights be negatively affected by the proposed activity/ies?</b>		NO	
<p>The proposed project will not have an impact on adjacent landowners during the operational phase. Note that noise and dust will be limited as far as possible.</p>			
<b>13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?</b>		NO	
<p>The proposed project can be summarised as the translocation of the existing diesel depot on portion 7 of the farm Avenham, to portion 5 of the farm Avenham. Thus, the proposed project will not have an impact on the urban edge as defined by Mangaung Metropolitan Municipality.</p>			
<b>14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?</b>		NO	
<p>The proposed project does not trigger any of the 17 SIPS.</p>			

<b>15. What will the benefits be to society in general and to the local communities?</b>	Please explain
<ul style="list-style-type: none"> <li>• Truck accidents have been at the centre of public fury for years. Road carnage in South Africa is caused by human, vehicle and road factors, of which the human factor is by far the highest. An individual's ability to hear, see, evaluate and react to information influences traffic safety. The road freight industry in South Africa is huge and one of the human factors that increase the likelihood of accidents when travelling is fatigue. Driver rest periods are therefore important as the drivers of trucks usually drives alone and without company to help keep them awake. Motorists and especially truck drivers should be educated about the importance of regular stops on long-distance trips. This application will provide the necessary facilities for stop-overs for trucks with the necessary amenities and which is centrally located and is therefore a preferred stop-over destination for trucks / travellers between destinations. Statistics suggest that truck-driver fatigue may be a contributing factor with regards to heavy-truck accidents. Conversely, educating the public (especially heavy duty truck drivers) about the importance of resting periodically during long-distance trips and the provision of shower facilities at stops and filling stations along national routes (N1) for long distance truck drivers can reduce heavy-truck accidents. This notion should be applied nationally to reduce the incidences of heavy-truck accidents in all provinces. The fatality rate is also highest after dark. The proposed project will thus have a positive effect in reducing accidents on the road and thereby serve the public interest.</li> <li>• The development will benefit the local community through employment opportunities</li> <li>• In addition, a fuelling station in close proximity to the local community will be available</li> </ul>	
<b>16. Any other need and desirability considerations related to the proposed activity?</b>	Please explain
N/A	
<b>17. How does the project fit into the National Development Plan for 2030?</b>	Please explain
N/A	

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

Section 23 of NEMA (Act 107, 27 November 1998) reads as follows:

'23. (1) The purpose of this Chapter is to promote the application of appropriate environmental management tools in order to ensure the integrated environmental management of activities,

(2) The general objective of integrated environmental management is to -

- (a) promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment;
- (b) identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impacts, maximizing benefits and promoting compliance with the principles of environmental management set out in section 2;
- (c) ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them;
- (d) ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment;
- (e) ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment; and
- (f) identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

(3) The Director-General must coordinate the activities of organs of state referred to in section 24(1) and assist them in giving effect to the objectives of this section and such assistance may include training, the publication of manuals and guidelines and the co-ordination of procedures.'

With the above in mind, the following objectives were taken into consideration:

1. An application for environmental authorisation was submitted to DESTEA
2. Integration of various principles of environmental management were implemented in order to make decisions regarding the significant effect of the proposed project on the environment
3. Identified, predicted and evaluated the actual potential impact of the proposed project on the environment, the socio-economic conditions and heritage, as well as the consequences and alternatives and options

- for mitigation of activities. This was done to minimize the possible negative impacts on the environment and maximizing benefits to mankind.
4. Taken the effects of activities on the environment into consideration before actions are to be taken in connection with them.
  5. A public participation process was followed.
  6. Considered the environmental attributes in management and decision-making with reference to the environment.
  7. Mitigation and management activities best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management were investigated.
  8. The report follows the laws to identify, predict and evaluate the actual and potential impacts associated with the development.
  9. Specialists investigated the site to determine baseline and to predict the impacts associated with the proposed project. The preferred alternative has been identified as the one that will have the least negative impact on the environment, as sensitive areas will be avoided as far as possible. In addition, already disturbed areas will be utilized as far as possible.
  10. A public participation process was followed. Consideration of the 2014 EIA Regulations has been applied in this regards.
  11. An EMPr is included, with mitigation measures that should be implemented during the planning, construction, operation and possible decommissioning of the proposed project. These mitigation measures are in line with the environmental requirements and Best Practise Principles.
  12. Relevant guidelines and procedures were used to produce this document. Therefore, relevant information is reflected, for sufficient co-governance to be implemented.
  13. The proposed project provides for the needs of the applicant while ensure compliance with environmental management principles.

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

Section 2 of NEMA (Act 107, 27 November 1998) reads as follows:

( 1 ) The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and—

- (a) shall apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in Chapter 2 of the Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination;
- (b) serve as the general framework within which environmental management and implementation plans must be formulated:

- (c) serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of this Act or any statutory provision concerning the protection of the environment;
- (d) serve as principles by reference to which a conciliator appointed under this Act must make recommendations; and
- (e) guide the interpretation, administration and implementation of this Act, and any other law concerned with the protection or management of the environment.

(2) Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.

(3) Development must be socially, environmentally and economically sustainable.

(4) (a) Sustainable development requires the consideration of all relevant factors including the following:

- (i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
  - (ii) into account the limits of current knowledge about the consequences of decisions and actions; and
  - (iii) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.
  - (iv) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
  - (v) that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
  - (vi) that waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
  - (vii) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
  - (viii) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;
  - (ix) that a risk-averse and cautious approach is applied, which takes
- (b) Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into



account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.

- (c) Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.
- (d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.
- (e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.
- (f) The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.
- (g) Decisions must take into account the interest, needs and values of all the interested and affected parties, and this includes recognizing all forms of knowledge, including traditional and ordinary knowledge.
- (h) Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.
- (i) The social, economic and environmental impacts of activities, including disadvantages and benefits must be considered, assessed and evaluated and decisions must be appropriate in the light of such consideration and assessment.
- j) The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected.
- (k) Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.
- (l) There must be intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment.
- (m) Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures.
- (n) Global and international responsibilities relating to the environment must be discharged in the national interest.
- (o) The environment is held in public trust for the people. The beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.
- (p) The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or

minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

- (q) The vital role of women and youth in environment management and development must be recognised and their full participation therein must be promoted.
- (r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

The applicant of the proposed project took the following into consideration:

1. That the disturbance of ecosystems and loss of biological diversity are minimised and remedied by implementing the mitigation measures in this document, the EMPr as well as best practices.
2. Environmental management must be integrated
3. Adverse environmental impacts (if any) shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.
4. The participation of all interested and affected parties in environmental governance must be promoted by means of the public participation process that forms part of the basic assessment process.
5. Community wellbeing and empowerment must be promoted by providing employment opportunities during the construction as well as operational phase.
6. The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers will be respected and protected.

## 11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act, 1998 (Act 107 of 1998)	Proposed development / clearance of indigenous vegetation	DESTEА	1998
National Heritage Resources Act (Act No 25 of 1999)	Proposed development / clearance of indigenous vegetation	SAHRA	1999
Environmental Conservation Act (Act 73 of 1989)	Proposed development / clearance of indigenous vegetation	DESTEА	1989
Water Act	Abstraction of water Consumption of water by humans Use of water for wash-bay	DWS	1998

## 12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

### a) Solid waste management

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

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

YES	
Unknown m <sup>3</sup>	

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

The contractor will be responsible for the disposal of waste generated during the construction phase. The contractor will remove the construction waste and dispose thereof at an authorized landfill site.

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

Solid waste disposal sites in Bloemfontein. Hazardous waste (if any) should be disposed of at an authorized hazardous landfill site such as Holfontein.

Will the activity produce solid waste during its operational phase?

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

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

	NO
	m <sup>3</sup>

N/A
-----

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

N/A
-----

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? 

	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? 

	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? 

	NO
--	----

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

	N/A
--	-----

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

	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? 

	NO
--	----

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

**NOTE:**

The listed activities itself will not produce effluent that will be treated and / or disposed of at another facility. However, the wash bays as well as waste associated with the ablution facility will be handled as follows:

**Wash bay:**

- Pre-treatment by oil & grease separators will be used to remove free oil and grit from the waste stream prior to discharge to the sewer stream.
- All oil and grease will thus be trapped and the collected material will be removed from site via a hazardous waste removal company.
- The quality of water to be transferred to the sewage stream will be tested on a monthly basis.

**Ablution Facility:**

- The site will only make use of septic tanks for sewage disposal.
- The sewage runoff of the proposed site is based on the following criteria:
  - The average dry weather flow for development is accepted as 400ℓ/day per 100m<sup>2</sup> GLA.
  - The estimated average dry weather flow for the development is 158.67 ℓ/day or 1.836ℓ/s.
  - The peak sewage runoff is accepted as 4,0 x ADWF plus 15 % infiltration being 8.446ℓ/s.
  - A Septic tank will have to be provided that can accommodate 400ℓ/day per 100m<sup>2</sup>.

The size of the septic tank, the amount of use, and the type of material discharged will determine how often your septic tank will need to be drained.

**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?

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:

**NOTE:**

The only emissions associated with the proposed project is emissions related to:

- exhaust emissions
- restaurant and take-away's

None of these emissions are controlled by any legislation.

**d) Waste permit**

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

	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	
-----	--

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

	NO
--	----

Describe the noise in terms of type and level:

Nuisance noise may be generated during the construction period. However, the significance thereof will be low and limited to areas under construction. Note that this may include blasting activities. Please note that adjacent landowners will be notified 24 hours before any blasting activities will occur.

Noise levels will be less than 80dB during the operational phase. Noise associated to the operational phase will be limited to the movement of vehicles (including trucks) on site.

**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
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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:

Unknown  
litres at this  
stage

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

YES	
-----	--

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

**NOTE:**

The applicant is aware that an application for various water uses need to be submitted. The required application will be submitted as soon as possible.

**14. ENERGY EFFICIENCY**

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

N/A

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

N/A

**SECTION B: SITE/AREA/PROPERTY DESCRIPTION****Important notes:**

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

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

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

- Has a specialist been consulted to assist with the completion of this section?
- 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:**

<b>Province</b>	Free State
<b>District Municipality</b>	Mangaung Metropolitan Municipality
<b>Local Municipality</b>	Mangaung Metropolitan Municipality
<b>Ward Number(s)</b>	44
<b>Farm name and number</b>	Portion 5 of the farm Avenham 2187
<b>Portion number</b>	Portion 5 of the farm Avenham 2187
<b>SG Code</b>	F00300000000218700005

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:**

Agricultural

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?

**NOTE:**

As the property does not fall within the Bloemfontein Town Planning Scheme, an application for change in land use for a portion of agricultural land from agriculture to "truck stop, diesel depot and associated amenities" was submitted.



**1. GRADIENT OF THE SITE**

Indicate the general gradient of the site.

**Alternative S1:**

Flat	1:50 1:20	–	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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**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?

- Shallow water table (less than 1.5m deep)
- Dolomite, sinkhole or doline areas
- Seasonally wet soils (often close to water bodies)
- Unstable rocky slopes or steep slopes with loose soil
- Dispersive soils (soils that dissolve in water)
- Soils with high clay content (clay fraction more than 40%)
- Any other unstable soil or geological feature
- An area sensitive to erosion

**Alternative S1:**

	NO
	NO
	NO
	NO
	NO
	NO
	NO
	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. GROUNDCOVER**

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

Natural veld -	Natural veld	Natural veld with	Veld dominated	Gardens
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good condition <sup>E</sup>	with scattered aliens <sup>E</sup>	heavy alien infestation <sup>E</sup>	by alien species <sup>E</sup>	
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.

**NOTE:**

Summary of ecological report:

The vegetation in the study area consists of Winburg Grassy Shrubland (Gh 7). The vegetation type is currently listed as being of Least Concern under the National List of Threatened Ecosystems (Notice 1477 of 2009) (National Environmental Management Biodiversity Act, 2004). The vegetation type is not currently subjected to any pronounced development pressures. Landscape features of this vegetation type are dominated by hills, slopes and escarpments of mesas creating a mosaic of habitats ranging from open grassland to shrubland (Mucina & Ruterford 2006).

The topography on the site is undulating with a low hill to the north of the site sloping gently toward the south. The vegetation on the site consists primarily of grassland with patches of shrubs where shallow soils occur. Due to historic land use the site is in a degraded condition and the natural vegetation composition has been transformed to a large degree. The site was previously utilised as a crocodile farm and the structures and infrastructure associated with it is still present on the site. Wastes such as scrap metal, construction materials and skeletal remains of crocodile food are littered around the site. A seasonal stream is located south of the site (approximately 350 meters from the proposed development area) but is unlikely to be affected by the development given that no leakage of diesel or contaminated runoff ends up in the stream.

The site itself does not contain any wetlands, drainage lines or any other water related systems. The seasonal stream to the south of the site will not be directly affected by the development. However, the nature of the development may cause pollution of the stream in the form of diesel contamination of runoff or groundwater. As long as adequate measures are implemented to ensure leaking of diesel or contamination of stormwater runoff does not occur the stream will not be affected in any way by the development.

The current land use consists of small residences and grazing by livestock. The historical structures of the crocodile farm are also still present on the site and occupy large areas of the site. Around the structures and residences, disturbance is high. The extent of the site is approximately 4 hectares. Building rubble, scrap metal and littering is evident on the site. Bare areas containing no vegetation are present in several areas on the site. Overgrazing is considered relatively high but this may also have been caused by human activities on the site. The vegetation is transformed and grass species indicate a high level of disturbance. The abundance of weeds also substantiates this.

The vegetation structure on the site is dominated by a degraded grass layer with clumps of shrubs and small trees where shallow soils occur. The grass layer is highly degraded and the species composition largely altered. The natural dominant grass species, *Themeda triandra*, only remains in small patches. The natural grass species have been replaced in most areas by pioneer grasses such as *Chloris virgata*, *Urochloa panicoides*, *Hyparrhenia hirta* and *Aristida canescen*. The low shrubs, *Searsia ciliata* and *Lycium horidum*, is also abundant on the site and is transitional between shallow and deeper soils. They have however increased as a result of overgrazing and disturbance.

Isolated specimens of the protected species, *Brunsvigia radulosa*, occur along the western boundary of the site. It is a widespread and common species but is listed as a protected species and therefore permits will have to be obtained to transplant it to an adjacent area.

Scattered *Vachelia karroo* specimens also occur in the grassland area. The areas of shallow soil are dominated by several shrub and small tree species. These include *Olea europaea* subsp. *africana* (Wild Olive), *Ehretia rigida*, *Ziziphus mucronata*, *Searsia ciliata*, *Buddleja saligna* and *Diospyros lycioides*. Of these the Wild Olives are protected species. It is a widespread and common species but is nonetheless protected and should be retained where possible or permits should be obtained to remove them.

Due to the degraded condition several weed species occur on the site. These include *Alternanthera pungens*, *Sphaeralcea bonariensis*, *Solanum incanum*, *Xanthium spinosum*, *Schkuhria bipinnata*, *Chenopodium murale* and *Tagetes minuta*.

In conclusion the remaining vegetation on the site is considered to be in an advanced state of disturbance and transformation. The historical land uses and current human activities and overgrazing has caused transformation of the natural vegetation. The vegetation type naturally occurring in the area,

Winburg Grassy Shrubland, is listed as being of Least Concern. The seasonal stream to the south of the site (approximately 350 meters) is unlikely to be affected as long as adequate measures are implemented to prevent contamination of surface and groundwater by hydrocarbons. Two species of low conservation significance is the protected bulb, *Brunsvigia radulosa*, and tree, *Olea europaea* subsp. *africana* (Wild Olive). These species should be retained otherwise permits must be obtained to remove them. A foot survey prior to construction should be done to mark all protected specimens and determine the need to remove them.

## 5. SURFACE WATER

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

Perennial River		NO	
Non-Perennial River		NO	
Permanent Wetland		NO	
Seasonal Wetland		NO	
Artificial Wetland		NO	
Estuarine / Lagoonal wetland		NO	

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

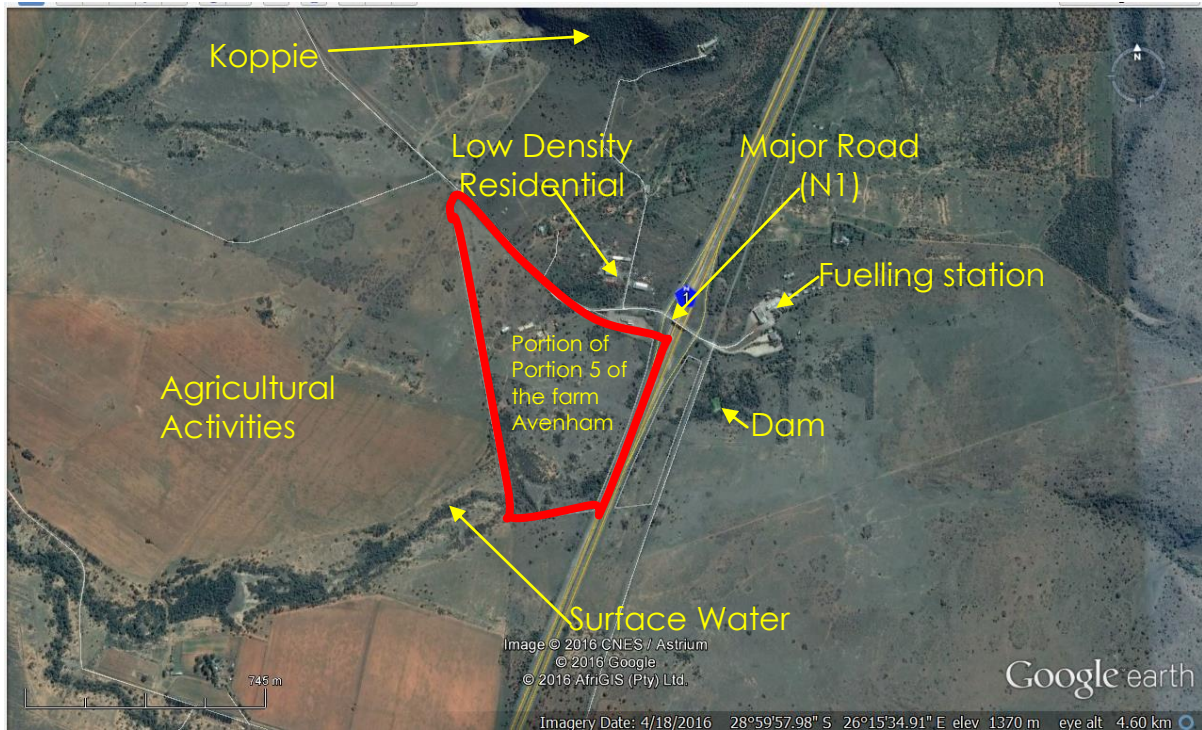
The site itself does not contain any wetlands, drainage lines or any other water related systems. A seasonal stream is located south of the site (approximately 350 meters from site) but is unlikely to be affected by the development given that no leakage of diesel or contaminated runoff ends up in the stream.

## 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 <sup>H</sup>
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential <sup>A</sup>	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant <sup>A</sup>	Nature conservation area
Medium industrial <sup>AN</sup>	Train station or shunting yard <sup>N</sup>	Mountain, koppie or

		ridge
Heavy industrial <sup>AN</sup>	Railway line <sup>N</sup>	Museum
Power station	Major road (4 lanes or more) <sup>N</sup>	Historical building
Office/consulting room	Airport <sup>N</sup>	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam <sup>A</sup>	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)



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

The N1 itself will not be impacted upon by the proposed activity. However, trucks that use the N1 may utilise the proposed new truck stop.

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

N/A

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

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

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

A Phase 1 Heritage Impact Assessment was carried out over a 25 ha area where planned development calls for the construction of a new diesel depot on Portion 5 of the farm Avenham 2187, located next to the N1 national road and about 10 km north of Bloemfontein Free State Province. The study area is located on weather-resistant dolerite outcrop and associated meta-sediments considered to be of low palaeontological significance. The superficial sediments in and around the study area are also not considered to be fossiliferous. Potential palaeontological impact resulting from excavations within the proposed area is considered very low. The affected area is assigned a site rating of Generally Protected C (GP.C). Several modern structures were recorded on more or less degraded terrain during the survey. There is no above-ground evidence of building structures older than 60 years, Stone Age archaeological remains, graves or material of cultural significance within the confines of the development footprint. The archaeological and cultural component of the proposed project footprint is assigned a site rating of General Protection C (GP.C). It is recommended that the development may proceed with no further heritage assessments required.

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:

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Will any building or structure older than 60 years be affected in any way?

	NO
	NO

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.

## 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.

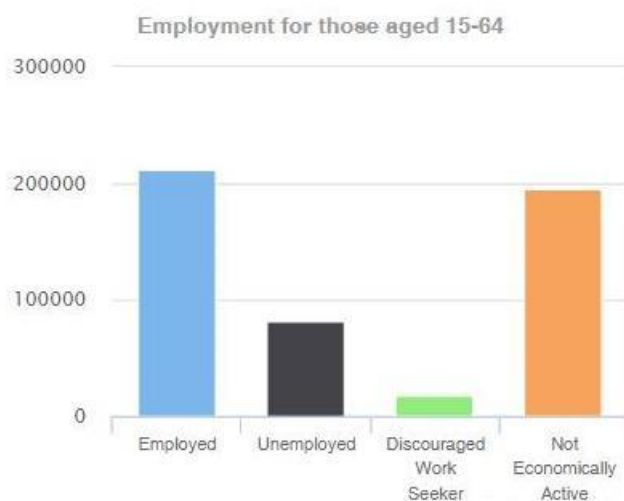
**NOTE:**

The following information was obtained from:

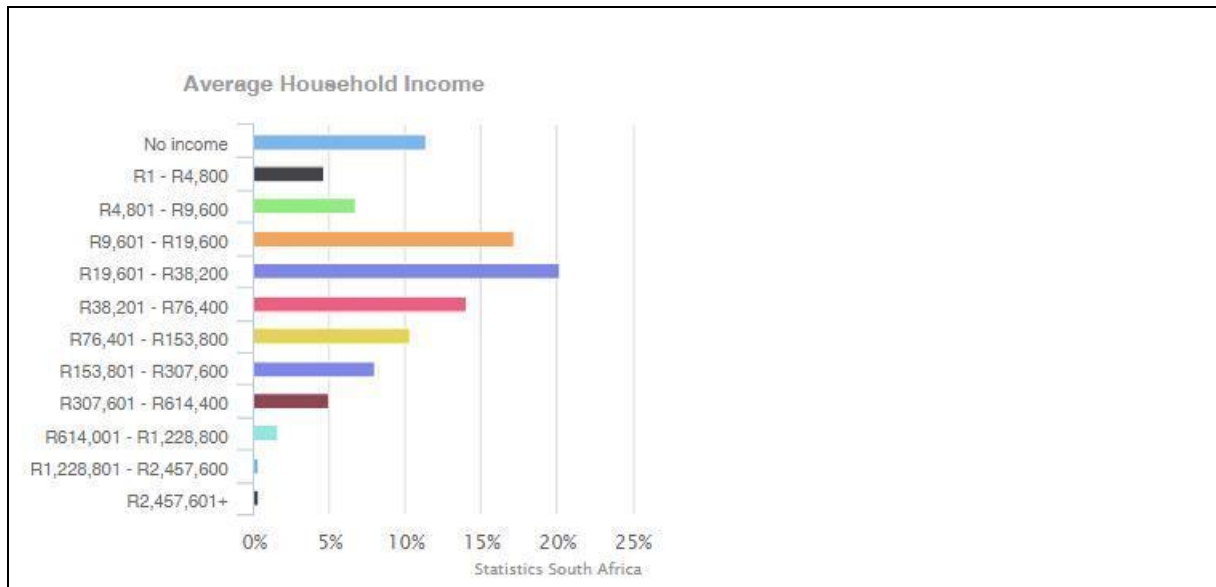
[http://www.statssa.gov.za/?page\\_id=993&id=mangaung-municipality](http://www.statssa.gov.za/?page_id=993&id=mangaung-municipality)

Level of unemployment:

Of the 292 971 economically active (employed or unemployed but looking or work) people in Mangaung, 27,7% are unemployed. 37,2% of the 150 128 economically active youth (15 – 34 years) in the area are unemployed.

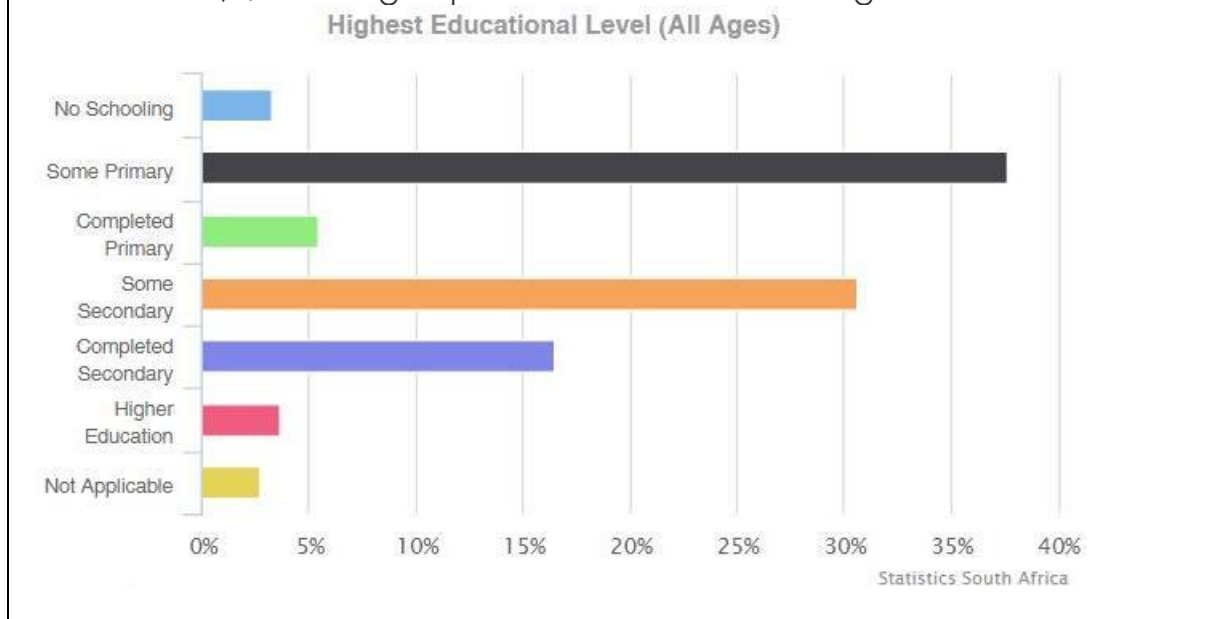


Economic profile of local municipality:



Level of education:

Mangaung has a population of 747 431, of which 83,3% are black African, 11,0% are white, 5,0% are coloured, with other population groups making up the remaining 0,7%. Of those aged 20 years and older, 4,7% have completed primary education, 33,2% have some secondary education, 30,3% have completed matric and 14,2% have some form of higher education. 4,3% of this group have no formal schooling.





**b) Socio-economic value of the activity**

What is the expected capital value of the activity on completion?	Unknown
What is the expected yearly income that will be generated by or as a result of the activity?	Unknown
Will the activity contribute to service infrastructure?	NO
Is the activity a public amenity?	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	Unknown, depends on contractor
What is the expected value of the employment opportunities during the development and construction phase?	Unknown, depends on contractor
What percentage of this will accrue to previously disadvantaged individuals?	Unknown, depends on contractor
How many permanent new employment opportunities will be created during the operational phase of the activity?	16
What is the expected current value of the employment opportunities during the first 10 years?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	Unknown

**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](mailto:BGIShelp@sanbi.org). Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP’s responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

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

<b>Systematic Biodiversity Planning Category</b>	<b>If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan</b>
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Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	According to the ecological report, a rough estimate of the percentage of vegetation condition on the site consist of roughly 20% near natural, 40% degraded and 40% transformed vegetation in comparison to natural vegetation of the region in pristine condition with no impacts.
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**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	0%	According to the ecological report, a rough estimate of the percentage of vegetation condition on the site consist of roughly 20% near natural, 40% degraded and 40% transformed vegetation in comparison to natural vegetation of the region in pristine condition with no impacts.  The current land use consists of small residences and grazing by livestock. The historical structures of the crocodile farm are also still present on the site and occupy large areas of the site. Around the structures and residences disturbance is high. The extent of the site is approximately 4 hectares. Building rubble, scrap metal and littering is evident on the site. Bare areas containing no vegetation are present in several areas on the site. Overgrazing is considered relatively high but this may also have been caused by human activities on the site. The vegetation is transformed and grass species indicate a high level of disturbance. The abundance of weeds also substantiates this.
Near Natural (includes areas with low to moderate level of alien invasive plants)	20%	
Degraded (includes areas heavily invaded by alien plants)	40%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	40%	

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		NO			NO		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)**

The vegetation in the study area consists of Winburg Grassy Shrubland (Gh 7). The vegetation type is currently listed as being of Least Concern under the National List of Threatened Ecosystems (Notice 1477 of 2009) (National Environmental Management Biodiversity Act, 2004). The vegetation type is not currently subjected to any pronounced development pressures. Landscape features of this vegetation type are dominated by hills, slopes and escarpments of mesas creating a mosaic of habitats ranging from open grassland to shrubland (Mucina & Rutherford 2006).

The topography on the site is undulating with a low hill to the north of the site sloping gently toward the south. The vegetation on the site consists primarily of grassland with patches of shrubs where shallow soils occur. Due to historic land use the site is in a degraded condition and the natural vegetation composition has been transformed to a large degree. The site was previously utilised as a crocodile farm and the structures and infrastructure associated with it is still present on the site. Wastes such as scrap metal, construction materials and skeletal remains of crocodile food are littered around the site. A seasonal stream is located south of the site (approximately 350 meters from the proposed development area) but is unlikely to be affected by the development given that no leakage of diesel or contaminated runoff ends up in the stream.

The site itself does not contain any wetlands, drainage lines or any other water related systems. The seasonal stream to the south of the site will not be directly affected by the development. However, the nature of the development may cause pollution of the stream in the form of diesel contamination of runoff or groundwater. As long as adequate measures are

implemented to ensure leaking of diesel or contamination of stormwater runoff does not occur the stream will not be affected in any way by the development.

The current land use consists of small residences and grazing by livestock. The historical structures of the crocodile farm are also still present on the site and occupy large areas of the site. Around the structures and residences, disturbance is high. The extent of the site is approximately 4 hectares. Building rubble, scrap metal and littering is evident on the site. Bare areas containing no vegetation are present in several areas on the site. Overgrazing is considered relatively high but this may also have been caused by human activities on the site. The vegetation is transformed and grass species indicate a high level of disturbance. The abundance of weeds also substantiates this.

The vegetation structure on the site is dominated by a degraded grass layer with clumps of shrubs and small trees where shallow soils occur. The grass layer is highly degraded and the species composition largely altered. The natural dominant grass species, *Themeda triandra*, only remains in small patches. The natural grass species have been replaced in most areas by pioneer grasses such as *Chloris virgata*, *Urochloa panicoides*, *Hyparrhenia hirta* and *Aristida canescen*. The low shrubs, *Searsia ciliata* and *Lycium horidum*, is also abundant on the site and is transitional between shallow and deeper soils. They have however increased as a result of overgrazing and disturbance.

Isolated specimens of the protected species, *Brunsvigia radulosa*, occur along the western boundary of the site. It is a widespread and common species but is listed as a protected species and therefore permits will have to be obtained to transplant it to an adjacent area.

Scattered *Vachelia karroo* specimens also occur in the grassland area. The areas of shallow soil are dominated by several shrub and small tree species. These include *Olea europaea* subsp. *africana* (Wild Olive), *Ehretia rigida*, *Ziziphus mucronata*, *Searsia ciliata*, *Buddleja saligna* and *Diospyros lycioides*. Of these the Wild Olives are protected species. It is a widespread and common species but is nonetheless protected and should be retained where possible or permits should be obtained to remove them.

Due to the degraded condition several weed species occur on the site. These include *Alternanthera pungens*, *Sphaeralcea bonariensis*, *Solanum incanum*, *Xanthium spinosum*, *Schkuhria bipinnata*, *Chenopodium murale* and *Tagetes minuta*.

In conclusion the remaining vegetation on the site is considered to be in an advanced state of disturbance and transformation. The historical land uses and current human activities and overgrazing has caused transformation of the natural vegetation. The vegetation type naturally occurring in the area, Winburg Grassy Shrubland, is listed as being of Least Concern. The seasonal stream to the south of the site (approximately 350 meters) is unlikely to be affected as long as adequate measures are implemented to prevent contamination of surface and groundwater by hydrocarbons. Two species of low conservation significance is the protected bulb, *Brunsvigia radulosa*, and tree, *Olea europaea* subsp. *africana* (Wild Olive). These species should be retained otherwise permits must be obtained to remove them. A foot survey prior to construction should be done to mark all protected specimens and determine the need to remove them.

## SECTION C: PUBLIC PARTICIPATION

### 1. ADVERTISEMENT AND NOTICE

<b>Publication name</b>	Die Volksblad	
<b>Date published</b>	11 July 2016	
<b>Site notice position</b>	<b>Latitude</b>	<b>Longitude</b>
	28° 59' 53.89"S	26° 16' 12.99"E
<b>Date placed</b>	12 July 2016	

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

### 2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 982

#### NOTE:

Identification of possible IAPs includes:

- Mangaung Metropolitan Municipality
  - Municipal Manager
  - Environmental Division
  - Planning Division
  - Ward councillor, Ward 44
- Dept. of Agriculture
- Dept. of Water and Sanitation
- SAHRA
- FSHRA
- Adjacent landowners

Site notices were placed on site.

Authorities were notified via registered post / hand delivery.

A legal notice was placed in Die Volksblad.

A copy of the dBAR was provided to all the registered parties.

A copy of the fBAR will be provided to all the registered parties.

All registered parties will be given the opportunity to comment on the BAR documents.

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

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Please note that other stake holders were notified by means of two on-site		

notices as well as a notification in Die Volksblad.
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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

Nr	Summary of main issues raised by I&APs	Summary of response from EAP
1	<p><b>Possibility of dumping of waste on site by Truck Stop Users</b></p> <ul style="list-style-type: none"> <li>• Will the area be cleaned on a daily basis to keep the area clean and tidy</li> </ul>	<ul style="list-style-type: none"> <li>• Bins for the collection of waste will be available on site</li> <li>• Employees will pick up all waste on site and dispose thereof according to best practices</li> <li>• This includes windblown waste</li> <li>• [See EMPr, Section 3.4(iv), (vi)]</li> <li>• The applicant also indicated that the area will be cleaned on a daily basis as employees will collect waste on site.</li> </ul>
2	<p><b>Veld fire risk</b></p> <ul style="list-style-type: none"> <li>• Will the vegetation near the development boundary be removed and the area be kept clear during the construction and operation phase to limit the possible occurrence of veld fires</li> </ul>	<ul style="list-style-type: none"> <li>• The applicant will ensure that the required mitigation measures will be implemented to limit the occurrence of fire outbreaks. This also includes the availability of fire extinguishers on site.</li> <li>• The applicant indicated that proper mitigation measures will be implemented to limit the occurrence of accidental fires. This includes the construction of a firebreak as well as the availability of firefighting equipment on site.</li> <li>• [See EMPr, Section 4(iv)]</li> </ul>
3	<p><b>Position of Access Road</b></p> <ul style="list-style-type: none"> <li>• Access should be gained at a</li> </ul>	<ul style="list-style-type: none"> <li>• From a traffic point of view, the relocation of the entrance and</li> </ul>

Nr	Summary of main issues raised by I&APs	Summary of response from EAP
	position that will provide acceptable sight distances	<p>exit to the west (on the proposed application property) is an improvement on the current spacing (at the existing diesel depot) with regards to access and acceptable sight distances. The relocation of the diesel depot therefore will accommodate the facilities in a more acceptable manner and therefore the impact on the area will be the same if not better that what it currently is.</p> <ul style="list-style-type: none"> <li>• The applicant confirmed that access to the site will be in such a way that road users will have an acceptable sight distance.</li> </ul>
4	<p><b>Safety</b></p> <ul style="list-style-type: none"> <li>• Will the area be fenced off to safeguard the area from theft activities</li> </ul>	<ul style="list-style-type: none"> <li>• The applicant confirmed that the site will be fenced off.</li> <li>• [See EMPr, Section 3.8(vi)]</li> </ul>

**NOTE:**

No other comments were received to date.

Any comments (including issues raised by IAPs) received on the dBAR will be included in the fBAR. Response to the above mentioned comments will also be provided in the fBAR.

**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	Tel No	Postal address
Mangaung	City Manager		P.O. Box 3704



Authority/Organ of State	Contact person	Tel No	Postal address
Metropolitan Municipality			Bloemfontein 9300
Mangaung Metropolitan Municipality	Environmental Division Me. Mpolokeng Kolobe		P.O. Box 3704 Bloemfontein 9300
Mangaung Metropolitan Municipality	Planning Division Mr. Collin Dihemo		P.O. Box 3704 Bloemfontein 9300
Mangaung Metropolitan Municipality	Ward councillor, ward 44		P.O. Box 3704 Bloemfontein 9300
Department of Agriculture	The Assistant Director	051 506 1585	P.O. Box 34521 Faunasig Bloemfontein 9325 94 Charlotte Maxeke St, Bloemfontein, 9301
Department of Water and Sanitation	Mr Willem Grobler	051 405 9000	Private Bag X528 Bloemfontein 9300
SAHRA		021 462 4509 021 462 4502	111 Harrington Street CAPE TOWN 8001
FSHRA	(on-line notification)	051 410 4750	C/O Henry and East Burger Street Business Partner Building Office 307 Bloemfontein 9301

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

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

## 6. CONSULTATION WITH OTHER STAKEHOLDERS

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

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

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

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

## SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

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

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

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
Planning and Design Phase	Planning and design  <b>NOTE:</b> Should the above not be taken into consideration during the Planning and Design Phase,	<b>Direct impacts:</b> <ul style="list-style-type: none"> <li>• None</li> </ul>	Medium – High Negative	<ul style="list-style-type: none"> <li>• No environmental mitigation measures is required during the planning phase on the proposed site, as no mitigation measures are to be implemented on site during the planning phase.</li> <li>• However, the engineers, specialists and environmental consultants took the following into consideration, to be implemented during the</li> </ul>	Low negative
		<b>Indirect impacts:</b> <ul style="list-style-type: none"> <li>• Soil and surface water pollution</li> </ul>	Medium – High Negative		Low negative
		<b>Cumulative</b>	Medium –		Low

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
	the environmental impacts associated with the construction and operation phase will be of high significance as the environment will be negatively affected.	<b>impacts:</b> <ul style="list-style-type: none"> <li>• Groundwater pollution</li> </ul>	High Negative	construction / operational phase: <ul style="list-style-type: none"> <li>- Removal of waste on site</li> <li>- Erosion control measures</li> <li>- Removal of vegetation</li> <li>- Protected vegetation</li> <li>- Removal of topsoil</li> <li>- Flooding</li> <li>- Pollution</li> <li>- Etc.</li> </ul>	negative
Construction phase	Removal of vegetation and topsoil	<b>Direct impacts:</b> <ul style="list-style-type: none"> <li>• Destruction of vegetation</li> <li>• Loss of topsoil</li> <li>• Loss of vegetative species of conservation concern</li> </ul>	Medium Negative	<ul style="list-style-type: none"> <li>• Vegetation clearance will be limited to the required area.</li> <li>• A permit for the removal of protected plant species will be obtained before the removal of these species.</li> <li>• Speed limit will be enforced on the construction vehicles and these vehicles will only make use of designated roads / pathways.</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<ul style="list-style-type: none"> <li>Noise elevation due to construction activities</li> <li>Nuisance dust generation</li> <li>Visual impact of rock and spoil material dumps (if any)</li> </ul>		<ul style="list-style-type: none"> <li>Dust control measures will be implemented if nuisance dust generation occurs during the construction period.</li> <li>Stockpiled material will be stored in such a way to limit the loss thereof. For example: <ul style="list-style-type: none"> <li>Bricks may be placed around the stockpiles, to limit the loss thereof due to rainy events.</li> <li>Stockpiles should not be higher than 1.5 m.</li> <li>The gradient of stockpiles should not be greater than 1:1.5.</li> </ul> </li> </ul>	
		<p><b>Indirect impacts:</b></p> <ul style="list-style-type: none"> <li>Erosion</li> <li>Establishment of alien / invader vegetation</li> </ul>	Medium Negative	<ul style="list-style-type: none"> <li>Establishment of alien / invader vegetation will be monitored and these species will be removed by hand or by an approved chemical before gestation thereof.</li> <li>All archaeological findings (if any) should be recorded and reported to SAHRA. No construction activities in the area may proceed without the</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<p>species</p> <ul style="list-style-type: none"> <li>• Possible impact on heritage artefacts</li> <li>• Loss of fauna on site.</li> </ul>		<p>authorisation from SAHRA.</p> <ul style="list-style-type: none"> <li>• Storm water measures will be implemented in order to manage storm water and this will also prevent erosion.</li> <li>• Visual inspections for the occurrence of erosion should be undertaken on a weekly basis.</li> <li>• No animals may be captured / harmed / killed on site.</li> <li>• Any occurrences of harmed animals should be reported to the ECO and recorded as such.</li> </ul>	
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>• Erosion</li> <li>• Establishment of alien vegetation</li> </ul>	<p>Medium Negative</p>	<ul style="list-style-type: none"> <li>• Establishment of alien / invader vegetation will be monitored and these species will be removed by hand or by an approved chemical before gestation thereof.</li> <li>• All archaeological findings (if any) should be recorded and reported to</li> </ul>	<p>Low Negative</p>

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<p>species.</p> <ul style="list-style-type: none"> <li>• Possible impact on heritage artefacts</li> <li>• Loss of fauna on site.</li> </ul>		<p>SAHRA. No construction activities in the area may proceed without the authorisation from SAHRA.</p> <ul style="list-style-type: none"> <li>• Storm water measures will be implemented in order to manage storm water and this will also prevent erosion.</li> <li>• Visual inspections for the occurrence of erosion should be undertaken on a weekly basis.</li> <li>• No animals may be captured / harmed / killed on site.</li> <li>• Any occurrences of harmed animals should be reported to the ECO and recorded as such.</li> </ul>	
	Handling of waste	<b>Direct impacts:</b>	Medium – High Negative	<ul style="list-style-type: none"> <li>• All waste currently on site should be removed and handled according to</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<ul style="list-style-type: none"> <li>• Spillage of material to be utilised during the construction phase, to the surrounding environment</li> <li>• Dumping of construction rubble and general waste on site</li> </ul>		<p>best practices</p> <ul style="list-style-type: none"> <li>• No waste (general / construction / potential hazardous / etc.) may be dumped in the veld / water features.</li> <li>• Waste classification should be undertaken.</li> <li>• Suitable waste bins etc. will be available on site for the temporary disposal of waste.</li> <li>• Waste will be removed from site and disposed of at an authorised landfill site.</li> <li>• Visual inspections for the occurrence of pollution should be undertaken daily.</li> </ul>	
		<p><b>Indirect impacts:</b></p> <ul style="list-style-type: none"> <li>• Soil and</li> </ul>	Medium – High Negative	<ul style="list-style-type: none"> <li>• Spills should be cleaned up immediately according to best practices</li> <li>• Record should be kept on site to</li> </ul>	Low Negative



Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		groundwater pollution due to spillage of potential hazardous substances such as hydraulic material.		indicate date of visual inspection, any spillages observed, and manner in which spill was treated.	
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>• Pollution of downstream watercourses</li> </ul>	Medium – High Negative	<ul style="list-style-type: none"> <li>• Spills should be cleaned up immediately according to best practices</li> <li>• Record should be kept on site to indicate date of visual inspection, any spillages observed, and manner in which spill was treated.</li> </ul>	Low Negative
	Health and Safety	<p><b>Direct impacts:</b></p> <ul style="list-style-type: none"> <li>• Road safety at road, especially at</li> </ul>	Medium Negative	<ul style="list-style-type: none"> <li>• The necessary precautions with regard to road safety will be implemented for construction work, especially at road crossings.</li> <li>• Speed limit will be enforced on the construction vehicles and these</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		road crossing <ul style="list-style-type: none"> <li>• Safety of employees, during the construction phase</li> <li>• Health issues, especially regarding contact with untreated sewage</li> </ul>		vehicles will only make use of designated roads / pathways. <ul style="list-style-type: none"> <li>• Health practitioner should be consulted should any health issues, especially regarding contact with hydraulic fuels.</li> <li>• All employees should be provided with proper PPE. The contractor / ECO should ensure that all employees wear the correct PPE at any time interval.</li> </ul>	
		<b>Indirect impacts:</b> <ul style="list-style-type: none"> <li>• Possible fire outbreaks</li> <li>• Injuries on site</li> <li>• Health issues on site</li> </ul>	Medium Negative	<ul style="list-style-type: none"> <li>• Fire extinguishers will be available, where required.</li> <li>• The correct PPE will be worn by all employees at all times.</li> <li>• Health practitioner should be consulted should any health issues, especially regarding contact with hydraulic fuels be suspected.</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>• Possible fire outbreaks</li> <li>• Injuries on site</li> <li>• Health issues on site</li> </ul>	Medium Negative	<ul style="list-style-type: none"> <li>• Fire extinguishers will be available, where required.</li> <li>• The correct PPE will be worn by all employees at all times.</li> <li>• Health practitioner should be consulted should any health issues, especially regarding contact with hydraulic fuels be suspected.</li> </ul>	Low Negative
Operational phase	This phase consists of the use of the proposed new truck stop as well as its associated facilities. Maintenance and repair will be undertaken on site, when necessary.	<p><b>Direct impacts:</b></p> <ul style="list-style-type: none"> <li>• Deterioration of the truck stop and associated infrastructure in the long term.</li> </ul>	Medium - Low Negative	<ul style="list-style-type: none"> <li>• Maintenance and repair will be undertaken on site, when necessary.</li> <li>• Visual inspections for possible leakage of hydraulic fuels should be undertaken on a regular basis.</li> <li>• Any leakages should be rectified as soon as possible. Spills should be cleaned by means of best practices.</li> </ul>	Low Negative
		<p><b>Indirect impacts:</b></p>	Medium – Low Negative	<ul style="list-style-type: none"> <li>• Establishment of alien vegetation will be monitored and alien species will be removed by hand or by an</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<ul style="list-style-type: none"> <li>Establishment of alien / invader species due to previous disturbance will also be associated with this phase.</li> <li>Increase in noise levels is possible.</li> <li>Erosion</li> </ul>		<p>approved chemical before gestation thereof.</p> <ul style="list-style-type: none"> <li>Visual inspections should be undertaken at least every 6 months to investigate the occurrence of fuel leakages and erosion.</li> <li>Any leakages should be rectified as soon as possible. Spills should be cleaned by means of best practices.</li> <li>Proper erosion mitigation measures should be implemented.</li> <li>Noise levels will be kept below 80dB.</li> </ul>	
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>Establishment of alien / invader</li> </ul>	Medium – Low Negative	<ul style="list-style-type: none"> <li>Maintenance and repair will be undertaken on site, when necessary.</li> </ul>	Low Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<p>species due to previous disturbance will also be associated with this phase.</p> <ul style="list-style-type: none"> <li>• Increase in noise levels is possible.</li> <li>• Erosion</li> </ul>			
Decommissioning and Closure	Activities associated with the decommissioning phase will be limited to the rehabilitation of areas disturbed during the construction phase. All	<p><b>Direct impacts:</b></p> <ul style="list-style-type: none"> <li>• Rehabilitation of disturbed area</li> <li>• Re-vegetation</li> <li>• Limit occurrence</li> </ul>	Medium Positive	<ul style="list-style-type: none"> <li>• All temporary infrastructure related to the construction phase will be removed from site.</li> <li>• Temporary concrete surfaces (if any) will be removed and compacted areas ripped.</li> <li>• The establishment of natural occurring vegetation will be encouraged.</li> </ul>	High Positive

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
	disturbed areas will be rehabilitated according to best practices. A rehabilitation plan will be developed, if it is decided to decommission the proposed truck stop and associated infrastructure before the cessation of the operation aspects of the proposed project. The rehabilitation plan will include management and mitigation	<p>of erosion</p> <ul style="list-style-type: none"> <li>• Proper storm water control</li> <li>• Limit visual impact</li> <li>• Limit noise levels</li> </ul>		<ul style="list-style-type: none"> <li>• No waste will be dumped on site and any waste occurring on site will be removed and disposed of according to best practices.</li> <li>• Establishment of extensive alien species will be monitored.</li> </ul>	
		<p><b>Indirect impacts:</b></p> <ul style="list-style-type: none"> <li>• Rehabilitation of disturbed area</li> </ul>	Medium Positive	<ul style="list-style-type: none"> <li>• Temporary infrastructure related to the construction phase will be removed from site.</li> <li>• Temporary concrete surfaces (if any) will be removed and compacted areas ripped.</li> <li>• The establishment of natural</li> </ul>	High Positive

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
	measures to be implemented during the decommissioning of the project.			<p>occurring vegetation will be encouraged.</p> <ul style="list-style-type: none"> <li>No waste will be dumped on site and any waste occurring on site will be removed and disposed of according to best practices.</li> <li>Establishment of extensive alien species will be monitored.</li> </ul>	
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>Rehabilitation of disturbed area</li> </ul>	Medium Positive	<ul style="list-style-type: none"> <li>The disturbed area will be hydro seeded to reinstate vegetation growth, where required.</li> <li>Establishment of alien vegetation will be monitored and alien species will be removed by hand or by an approved chemical before gestation thereof.</li> </ul>	High Positive
No-go	Keeping the status quo	<p><b>Direct impacts:</b></p> <ul style="list-style-type: none"> <li>Waste currently on</li> </ul>	High Negative	<ul style="list-style-type: none"> <li>Removal of waste should be promoted.</li> </ul>	Medium Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		site will not be removed			
		<p><b>Indirect impacts:</b></p> <ul style="list-style-type: none"> <li>Truck drivers will have to travel far distances without a stop-over. This will have an enormous negative impact on the road safety of the truck drivers themselves, their cargo as well as general road</li> </ul>	High Negative	<ul style="list-style-type: none"> <li>Truck drivers should be encouraged to stay awake while transporting their cargo.</li> </ul>	Medium – High Negative



Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		<p>users.</p> <ul style="list-style-type: none"> <li>• Loss of employment opportunities</li> </ul>			
		<p><b>Cumulative impacts:</b></p> <ul style="list-style-type: none"> <li>• Truck drivers will have to travel far distances without a stop-over. This will have an enormous negative impact on the road safety of the truck drivers themselves, their cargo</li> </ul>	High Negative	<ul style="list-style-type: none"> <li>• Truck drivers should be encouraged to stay awake while transporting their cargo.</li> </ul>	Medium – High Negative

Phase	Activity	Impact summary	Significance without mitigation	Proposed mitigation	Significance with mitigation
		as well as general road users (loss of lives and / or cargo due to accidents). <ul style="list-style-type: none"><li>• Loss of employment opportunities</li></ul>			

A complete impact assessment in terms of Regulation 19(3) of GN 982 must be included as Appendix F.

## 2. ENVIRONMENTAL IMPACT STATEMENT

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

Environmental impact statement for the proposed construction of a truck stop			
Alternative 1 <sup>Preferred</sup>			
Nr	Impact	Without Mitigation	With Mitigation
1	Impacts on vegetation and listed or protected plant species resulting from the construction phase	Medium Negative	Low Negative
2	Impacts on animal species resulting from construction activities	Medium-Low Negative	Low Negative
3	Erosion	High Negative	Low Negative
4	Pollution	High Negative	Low Negative
5	Health and Safety	Medium Negative	Low Negative
6	Heritage, including archaeological and paleontological	Medium-Low Negative	Low Negative
7	Visual and noise	Medium-Low Negative	Low Negative

### NOTE:

By implementing the recommendation of the ecological report, heritage report, this document, the EMPr as well as best practices, the impact of the proposed project will be kept to a minimum.

### Alternative 1<sup>Preferred</sup>

The same as above, including:

The expected environmental impacts relating to the proposed project are mostly temporary (during the construction phase) and the mitigation measures referred to in the current document, the EMPr, Specialist Reports as well as Best Practices will ensure that the disturbance is kept to a minimum and ensure that adequate rehabilitation takes place.

### No-go alternative (compulsory)

The no-go alternative is not seen as a reasonable / feasible alternative due to the following:

- The property belongs to the applicant
- A truck stop in the area is required to provide truck drivers with the opportunity to re-fuel
- A truck stop in the area is required to provide truck drivers with the opportunity to relax during their long distance travelling, to limit fatigue.
- The proposed site is ideally located, as it is adjacent to the N1 route.

The impacts expected can be minimised through the recommended mitigation measures and therefore the no-go alternative is not ideal.

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

N/A
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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.

Refer to the EMPr attached hereto for recommended mitigation measures.
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Is an EMPr attached?

YES	
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The EMPr must be attached as Appendix G.

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

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

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

\_\_\_\_\_  
NAME OF EAP

\_\_\_\_\_  
SIGNATURE OF EAP

\_\_\_\_\_  
DATE

## SECTION F: APPENDIXES

The following appendixes must be attached:

**Appendix A:** Maps

**Appendix B:** Photographs

**Appendix C:** Facility illustration(s)

**Appendix D:** Specialist reports

Appendix D<sub>1</sub>: Heritage

Appendix D<sub>2</sub>: Ecological

Appendix D<sub>3</sub>: Bulk Service Report

Appendix D<sub>4</sub>: Traffic Impact Study

**Appendix E:** Public Participation

Appendix E<sub>1</sub>: List of identified possible IAPs

Appendix E<sub>2</sub>: Proof of notification

Appendix E<sub>3</sub>: List of registered parties

Appendix E<sub>4</sub>: List of comments received

Appendix E<sub>5</sub>: Response to comments received

Appendix E<sub>6</sub>: Proof of submission of dBAR to registered parties

**Appendix F:** Impact Assessment

**Appendix G:** Environmental Management Programme (EMPr)

**Appendix H:** Details of EAP and expertise

**Appendix I:** Specialist's declaration of interest

**NOTE: Declaration by EAP is attached to Appendix H.**

Heritage

Ecological

**Appendix J:** Additional Information

Appendix J<sub>1</sub>: Confirmation from MMM

Appendix J<sub>2</sub>: Title Deed Document