



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

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.

File Reference Number:

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NEAS Reference Number:

Date Received:

Due date for acknowledgement:

Due date for acceptance:

Due date for decision

Kindly note that:

(For official use only)

1. The report must be compiled by an independent Environmental Assessment Practitioner.
2. 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.
3. Where applicable **tick** the boxes that are applicable in the report.
4. 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 Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
5. An incomplete report may be returned to the applicant for revision.
6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

Cnr Suid & Dorp Streets, POLOKWANE, 0700, P O Box 55464, POLOKWANE, 0700
Tel: 015 290 7138/ 7167, Fax: 015 295 5015, website: <http://www.ledet.gov.za>

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7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2014.
9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

<p><u>Postal Address:</u> Central Administration Office Environmental Impact Management P. O. Box 55464 POLOKWANE 0700</p>	<p><u>Physical Address:</u> Central Administration Office Environmental Affairs Building Cnr Suid and Dorp Streets POLOKWANE 0699</p>
<p>Queries should be directed to the Central Administration Office: Environmental Impact Management:-</p> <p>For attention: Mr E. V. Maluleke</p> <p>Tel: (015) 290 7138/ (015) 290 7167</p> <p>Fax: (015) 295 5015</p> <p>Email: malulekeev@ledet.gov.za</p>	

View the Department's website at [http://www.ledet.gov.za/](http://www.ledet.gov.za) for the latest version of the documents.

SECTION A: ACTIVITY INFORMATION

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

YES

If YES, please complete the form entitled "Details of specialist and declaration of interest" or appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

The project entails the construction of a filling station on Portion 8 of the farm De Grooteboom 373 KT.

The filling station will consist of the following tanks (306 000 liter):

- 138 000 liter petrol (3x 46 000 liter)
- 138 000 liter diesel (3x 46 000 liter)
- 30 000 liter paraffin (1x 30 000 liter)

The development will be done in phases.

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;

The proposed site is located on Portion 8 of the farm De Grooteboom 373 KT near Steelpoort.

The proposed site is big enough to accommodate the proposed filling station. The topography of the area is relatively flat.

Access and electricity are available at the proposed site.

The area is not environmentally sensitive, it is disturbed by previous development.

The zoning for the property is "Business".

The proposed site is thus highly suitable for a development of this kind. Other alternative sites are therefore not feasible. Therefore application for exemption from having to assess alternative sites is herewith made.

(b) the type of activity to be undertaken;

This project entails the construction of a filling station.

¹ Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.

(c) the design or layout of the activity;

The filling station will consist of the following tanks (306 000 liter):

- 138 000 liter petrol (3x 46 000 liter)
- 138 000 liter diesel (3x 46 000 liter)
- 30 000 liter paraffin (1x 30 000 liter)

(d) the technology to be used in the activity;

No technology alternatives were identified.

(e) the operational aspects of the activity; and

Due to the extremely limited extent of the proposed activity, the impact upon the environment will be minimal. The surface area that will be covered on the ground will be approximately 2,5ha.

(f) the option of not implementing the activity.

A service / filling station land use can be defined as a building designed or used for the supplying of fuel, the sale of oil, additives, new emergency spares, promotional items, firewood, charcoal and fire lighters, a shop (convenience store), one working bay for emergency repairs to vehicles, an area for mechanical car wash unit, an automatic teller machine (ATM) and offices which are direct relation to a filling station. The existing buildings on site will be utilized to fulfill in these necessities and be extended with a forecourt area and canopy to fulfill in the fuel customers' requirements.

Should the proposed development not take place then the above services will not be available for the local community and they will have to continue to drive distances for these services.

The Reader is referred to Appendix G (Assessment of Alternatives) for a description of the identified alternatives that have been investigated.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity 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 Department 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.

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

3. ACTIVITY POSITION

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, minutes and seconds. The projection that must be used in all cases is the Hartebeeshoek94 WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

Latitude (S):

Longitude (E):

Alternative:

Alternative S1² (preferred or only site alternative)

24°	56'	16.7"	30°	07'	47.3"
°	'	"	°	'	"
°	'	"	°	'	"

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred or only route alternative)

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

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

Alternative S2 (if any)

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

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

Alternative S3 (if any)

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

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

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

² "Alternative S.." refer to site alternatives.

4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1³ (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or,

for linear activities:

Size of the activity:

	25 000m ²
	m ²
	m ²

Length of the activity:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

	m
	m
	m

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

Size of the site/servitude:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

	25 000m ²
	m ²
	m ²

5. SITE ACCESS

Does ready access to the site exist?

YES	
	m

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

Describe the type of access road planned:

The existing road (Lydenburg road) will be used as an access road.

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.

³ "Alternative A.." refer to activity, process, technology or other alternatives.
LEDET BA Report, EIA 2014: Project Name: Filling Station – Steelpoort

6. SITE OR 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:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by Department of Water Affairs);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.10 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.11 the positions from where photographs of the site were taken.

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

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 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.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R20 000 000-00
What is the expected yearly income that will be generated by or as a result of the activity?	R12 000 000-00
Will the activity contribute to service infrastructure?	YES
Is the activity a public amenity?	YES
How many new employment opportunities will be created in the development phase of the activity?	25
What is the expected value of the employment opportunities during the development phase?	R60 000-00
What percentage of this will accrue to previously disadvantaged individuals?	60%
How many permanent new employment opportunities will be created during the operational phase of the activity?	15
What is the expected current value of the employment opportunities during the first 10 years?	R2 000 000-00
What percentage of this will accrue to previously disadvantaged individuals?	60%

9(b) Need and desirability of the activity

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

NEED:	
i.	Was the relevant municipality involved in the application? YES
ii.	Does the proposed land use fall within the municipal Integrated Development Plan? YES
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:

DESIRABILITY:	
i.	Does the proposed land use / development fit the surrounding area? <i>It aims to serve all traffic, travelling along the Lydenburg road north and southbound. The service station is also intended to provide service to vehicles in the local trading area consisting of agricultural and mining activities.</i> YES
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area? <i>A Town- and Regional Planner was appointed to do the necessary rezoning for the property. The property is zoned "Business".</i> YES

iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it? <i>The proposed filling station will improve the access to fuel in the area.</i>	YES	
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
v.	Will the proposed land use / development impact on the sense of place?		NO
vi.	Will the proposed land use / development set a precedent?		NO
vii.	Will any person's rights be affected by the proposed land use / development?		NO
viii.	Will the proposed land use / development compromise the "urban edge"?		NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		

BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES	
ii.	Explain: <i>It aims to serve all traffic, travelling along the Lydenburg road north and southbound. The service station is also intended to provide service to vehicles in the local trading area consisting of agricultural and mining activities.</i>		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
iv.	Explain: <i>It aims to serve all traffic, travelling along the Lydenburg road north and southbound. The service station is also intended to provide service to vehicles in the local trading area consisting of agricultural and mining activities.</i>		

10. 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:	Administering authority:	Date:
Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998)	Department of Environmental Affairs	2014
Constitution of South Africa Act No. 108 of 1996	National & Provincial	18 December 1996
National Environmental Management: Biodiversity Act No. 10 of 2004	National & Provincial	7 June 2004
Section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999)	SAHRA	1999

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

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

YES

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

±50m³

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

Trucks / pickups will collect all the building rubble and it will be disposed of at the municipal waste disposal site. The rubble will be covered with a tarpaulin to prevent that any waste will be blown off from the vehicle. Light rubble which can be blown off vehicles will be placed in containers when it is transport.

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

Because of the remoteness of application property the Greater Tubatse Municipality currently provides no refuse removal services to the area. The closest refuse dumping site is the Greater Tubatse dumping site in Burgersfort.

Will the activity produce solid waste during its operational phase?

YES

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

±50m³

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

The solid waste will mainly consist of households and it will be collected in waste bins. The proposed development will not produce hazardous waste.

The temporary storage facility will be free from odour or emissions to prevent any annoyance to the surrounding area. The waste bins will be provided with lids and it will not be overfilled. The developer will make sure that the waste bins are always in a good condition.

Icon Metals will remove all the solid waste on a weekly base.

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

**Because of the remoteness of application property the Greater Tubatse Municipality currently provides no refuse removal services to the area. The closest refuse dumping site is the Tubatse dumping site in Burgersfort.
Icon Metals will remove all the solid waste on a weekly base.**

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 department 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 relevant legislation? NO
If yes, inform the department and request a change to an application for scoping and EIA.

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 Department to determine whether it is necessary to change to an application for scoping and EIA.

11(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?

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

If yes, the applicant should consult with the Department 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

If yes, provide the particulars of the facility:

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

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

The proposed development area has no municipal sewer point. It is proposed herewith that a septic tank will be installed on site and that a honey sucker will empty the septic tank on a weekly base.

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

	NO
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If yes, is it controlled by any legislation of any sphere of government?

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.

If no, describe the emissions in terms of type and concentration:

11(d) Generation of noise

Will the activity generate noise?

	NO
--	-----------

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

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.

If no, describe the noise in terms of type and level:

12. WATER USE

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

		Groundwater			
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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:

570 000 litres
YES

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

The maximum estimated daily demand of a Filling Station was given as 19 kℓ/day for the filling station, ablutions and a small shop. Water storage tanks will be installed on site, these include; 40 000ℓ fire requirement storage, 40 000ℓ clean water storage, 40 000ℓ irrigation and grey water storage and a 20 000ℓ filtered drinking water storage. From the hydrogeological information the demand will require a capture zone of approximately 47ha.

See section 8 Existing and Proposed Water Use in the Geohydrological Report in Appendix D. This should be sufficient for the Filling Station development. It should be noted that other water users also occur within this catchment area but that the impact would be minimal.

13. ENERGY EFFICIENCY

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

Eskom electricity is available on site.

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

Eskom electricity is available on site.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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

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

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

3. Has a specialist been consulted to assist with the completion of this section?

YES	
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If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address:

The proposed site is located on Portion 8 of the Farm De Grooteboom 373 KT near Steelpoort, Greater Tubatse Municipal area.

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Town/district:

Steelpoort

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

Business

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?

	NO
YES	

Must a building plan be submitted to the local authority?

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 indication of the project site position as well as the positions of the alternative sites, if any;
- 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, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat						
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Alternative S2 (if any):

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

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline		2.6 Plain	√
2.2 Plateau		2.7 Undulating plain / low hills	
2.3 Side slope of hill/mountain		2.8 Dune	
2.4 Closed valley		2.9 Seafront	
2.5 Open valley			

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:	Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	NO	YES	NO	YES	NO
An area sensitive to erosion	NO	YES	NO	YES	NO

According to the 1:250 000-scale geological sheet 2430 Pilgrim's Rest, the site is underlain by "Vno" at depth with possible NNW to SSE striking intrusive "Jd" dykes towards the west of the site. "Q" deposits are situated to the eastern, northern and western boundaries of the site. The symbols represent the following geological formations:

- Vno: Fine-grained norite from the Rustenburg Layered Suite;
- Jd: Fine-grained dolerite, commonly porphyritic, amygdaloidal (to the north-west of the site).
- Q: Surficial deposits including alluvium and scree (situated outside the western, northern and eastern boundaries of the site).

The site is not underlain by potentially soluble rock formations such as dolomite and limestone. The site is considered non-dolomitic and a dolomite stability investigation is not required.

Numerous prominent NNE to SSW striking dolerite dykes and NW to SE striking faults are indicated on the geological sheet in the region. No other prominent lineaments such as shear zones are present in close proximity of the area of interest.

The major geotechnical constraints as from a foundation perspective can be summarized as:

- Thick collapsible/compressible soils;
- Localised areas with slight to medium potential for soil heave expected;
- Aggressiveness of the soil/water to ferrous metals/services/tanks;
- Expected shallow seasonal seepage water and/or saturated profiles;
- Flat lying area situated adjacent to a known drainage feature.

One or a combination of the following foundation options will be recommended for the single to double story low bearing (<50kPa induced loads) masonry structures to be erected on the site:

- Stiffened strip footings, stiffened or cellular raft;
- Compaction of in-situ soils below individual footings (modified);

c) Soil raft.

Stiffened strip footings, stiffened or cellular raft:

- Stiffened strip footings or stiffened or cellular raft with articulation joints or solid lightly reinforced masonry;
- Bearing capacity not to exceed 50 kPa;
- Fabric reinforcement in floor slabs;
- Site drainage and service/plumbing precautions.

Compaction of in-situ soils below individual footings in combination of modified normal construction (as for site class H1):

- Remove in-situ material below foundations to a depth and width of 1,5 times the foundation width and replace with inert material (refer to soil construction materials section, majority of on-site soils are considered inert) compacted to 93% MOD AASHTO density at -1% to +2% of optimum moisture content;
- Lightly reinforced strip footings, articulation joints at all internal/external doors, light reinforcement in masonry, site drainage and service/plumbing precautions.

Soil raft in combination with modified normal construction (as for site class H1):

- Remove in situ material to 1,0 m beyond perimeter of building to a depth and width of 1,5 times the widest foundation and replace with inert material (refer to soil construction materials section, majority of on-site soils considered inert) compacted to 93% MOD AASHTO density at -1% to +2% of optimum moisture content.
- If the in-situ material is to be used for matters construction, lightly reinforced strip footings, articulation joints at all internal/external doors, light reinforcement in masonry, site drainage and service/plumbing precautions should be considered in combination of the mattress mainly due to the expected heave.
- If inert material is imported or selected during earthwork operations by a competent person (uncompressible and non-expansive coarser grained soils, or on-site "SC" soils with lesser percentage of fines) soil raft construction with normal construction with lightly reinforced strip footings and light reinforcement in masonry can be considered.

Open foundation or service trenches should be inspected by a competent person (preferably and engineering geologist or geotechnical engineer) before casting or construction of the foundations to verify that the foundation design and precautionary measures are suitable for the actual footprint conditions encountered.

See Geotechnical Report in Appendix D.

4. GROUND COVER

Indicate the types of groundcover present on the site:

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

Natural veld - good condition ^E				
				Bare soil

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does 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:

5.1 Natural area	√	5.22 School	
5.2 Low density residential		5.23 Tertiary education facility	
5.3 Medium density residential		5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial ^{AN}		5.26 Museum	
5.6 Office/consulting room		5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam ^A		5.29 Sewage treatment plant ^A	
5.9 Light industrial		5.30 Train station or shunting yard ^N	
5.10 Heavy industrial ^{AN}		5.31 Railway line ^N	
5.11 Power station		5.32 Major road (4 lanes or more)	
5.12 Sport facilities		5.33 Airport ^N	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station ^H		5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	
5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture	√	5.39 Mountain, koppie or ridge	
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	
5.21 Dam or Reservoir		5.42 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?

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

If YES, specify and explain:	
If NO, specify:	

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

If YES, specify and explain:	
If NO, specify:	

6. 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

NO

Archaeological or palaeontological sites, on or close (within 20m) to the site?

If YES, explain:

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

Briefly explain the findings of the specialist:

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

NO

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

NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the department) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the department;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the department, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the department in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (v) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the department in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these Regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the department to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in

these Regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input.

Name of Authority informed:	Comments received (Yes or No)
The Director Department of Agriculture Land Use & Soil Management P.O. Box 3620 POLOKWANE 0700 Mr. Foletji Mahlakoane	No
Ward Councillor – De Grooteboom P.O. Box 206 Burgersfort 1150	No
The Chief Director Department of Water Affairs WQM Section Private Bag X9506 POLOKWANE 0700	No
Greater Tubatse Local Municipality P.O. Box 206 Burgersfort 1150	No
Department of Sports, Arts and Culture Postnet Suite 21 Private Bag X9307 POLOKWANE 0700 Mr. Donald Lithole	No

Greater Sekhukhune District Municipality Private Bag X8611 Groblersdal 0470	No
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7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?

	NO
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If “YES”, briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

No comments were received from the stakeholders. The Consultative BAR will be distributed for comments.

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. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

No issues were raised by Interested and Affected Parties.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report as Annexure E):

-

2. 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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) 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.

Alternative (preferred alternative)

PLANNING AND DESIGN PHASE

Direct impacts:

- The destruction of natural vegetation during initial investigations, due to induced vehicular movement e.g. surveyors vehicles etc.

Existing tracks/roads should be used when accessing the site for planning purposes. Sampling rather than removal of existing plant material should take place (and then only if essential).

- Damage to flora due to site clearing

Existing indigenous trees should be retained where possible. Excessive loss of vegetation should be avoided. Vehicular access should be restricted to essential areas only. Grass occurring on and near construction sites should be retained where possible, to assist in retarding erosion. During excavations, the area that is disturbed should be kept as small as possible, so as to minimise disturbances to the environment.

Indirect impacts:

- Soil erosion due to vegetation clearance

As much natural vegetation should be retained as is possible (especially natural occurring trees).

- Unsocial activities at construction site (e.g. crime)

Appointed contractors should be required to implement security measures at construction camps/material laydown areas. Security gate control measures should be implemented in order that only labourers and authorised persons obtain access to the construction camps/material laydown areas.

- Construction traffic and access

Existing tracks/roads should be used when accessing the site.

- Impact of construction noise on adjacent residential areas

Keep residents of surrounding properties informed if any unusually noisy activities are planned. Noise impacts are reduced over distance at a rate of 1db (decibel) per 13 metres. Working hours should be limited to between 06h00 and 17h00 (Mondays to Saturdays only). Adjacent residents shall be informed of unusually noisy activities that will be undertaken. Works instructions shall be issued regarding the minimisation of noise to all workers (especially those using noisy equipment).

- Proliferation of alien plant species during and after construction

Regulation 15 of the Act on the Conservation of Agricultural Resources (as amended), Act No. 43 of 1983, determines that the establishment of declared weeds and invasive plants during and after development should be prohibited. It is recommended that alien species be removed and destroyed, preferably burned, before commencement of any construction activities.

- Impact of nuisances resulting from construction (e.g. dust, smoke & noise)

Damping down of unsurfaced roads should take place. Trucks should avoid travelling unnecessarily through residential areas or private land.

- High positive expectations regarding employment opportunities

Local employment and procurement should receive priority when embarking upon planning and construction activities.

Cumulative impacts:

- Visual impact of construction activities

Retain as many existing trees as possible to screen construction works. Construction activities should be kept clustered on site at all times.

- Temporary employment creation

Where appropriate, labour intensive construction methods should be used. Where possible training of labour should take place to improve benefits to individuals well beyond this project. Use of emerging contractors should take place where possible.

CONSTRUCTION PHASE

Direct impacts:

- Construction traffic and access

Damping down of unsurfaced roads should take place. Trucks should avoid travelling unnecessarily through private land.

- Construction impacts on soils (upsetting of soil horizons through groundworks and/or compaction by vehicles)

Selective stripping of topsoil, subsoil and overburden should take place. Stockpiling of removed earth (separately) should take place and be returned for backfilling in the correct soil horizon order. In all construction areas (e.g. material laydown areas), topsoil and subsoils should be protected from contamination/pollution (e.g. by fuel etc.). Stockpiling of removed earth should not occur in drainage lines or impede surface water runoff.

- Pollution of groundwater

Controlled use and or storage of all fuels and chemicals during construction is advised. Due to very limited amounts of the aforementioned substances being used during construction, leaching thereof into the underground water is highly unlikely. Adequate fuel containment facilities should however be used. Adequate sanitary facilities and ablutions must be provided for construction workers.

- Soil erosion due to vegetation clearance

When soil is cleared of vegetation, management techniques to prevent water erosion should be employed (e.g. reduction of water velocity and the diversion of surface water runoff downslope).

- Damage to flora due to site clearing

Existing indigenous trees should be retained where possible. Excessive loss of vegetation should be avoided. Vehicular access should be restricted to essential areas only. Grass occurring on and near construction sites should be retained where possible, to assist in retarding erosion. During excavations, the area that is disturbed should be kept as small as possible, so as to minimise disturbances to the environment.

Indirect impacts:

- Potential injury to construction workers

Implementation of safety measures and work procedures and first aid facilities should be required of contractors.

- Unsocial activities at construction site (e.g. crime)

Appointed contractors should be required to implement security measures at construction camps/material laydown areas. Security gate control measures should be implemented in order that only labourers and authorised persons obtain access to the construction camps/material laydown areas.

- Impact of construction noise on adjacent residential areas

Keep residents of surrounding properties informed if any unusually noisy activities are planned. Noise impacts are reduced over distance at a rate of 1db (decibel) per 13 metres. Working hours should be limited to between 06h00 and 17h00 (Mondays to Saturdays only).

- Plant collection, utilising of trees for firewood, etc. by construction workers

Effective site control and monitoring by site engineer should take place. No fires should be allowed on site except in designated areas. Access to the site should be controlled - local disadvantaged residents should be allowed to collect firewood (only where bush is to be cleared).

- Visual impact of construction activities

Retain as many existing trees as possible to screen construction works. Construction activities should be kept clustered on site at all times.

- Impact of nuisances resulting from construction (e.g. dust, smoke & noise)

Damping down of graded roads and cleared areas should take place during construction. As much natural vegetation should be retained as is possible (especially natural occurring trees). As a mitigatory measure, construction should be limited to normal working hours. Construction shall be restricted to limited working hours (06h00 to 17h00 from Monday to Saturdays only). No work shall be conducted on Sundays. Adjacent residents shall be informed of unusually noisy activities that will be undertaken. Works instructions shall be issued regarding the minimisation of noise to all workers (especially those using noisy equipment).

- Uncovering of heritage or archaeological sites/resources/graves

In the case of an archaeological/heritage resources "find", all excavation work should be halted and a heritage resources practitioner should be consulted (or alternatively the nearest SAHRA office). If found, graves shall be relocated in accordance with the stipulations of the South African Heritage Resources Act and its relevant regulations pertaining to graves.

Cumulative impacts:

- Replacement of fauna due to site clearing

Translocation of wild animals noted during construction shall be undertaken by a suitably qualified contractor. This shall only be done after the required permits for translocation have been obtained from LEDET.

- Proliferation of alien plant species during and after construction

Regulation 15 of the Act on the Conservation of Agricultural Resources (as amended), Act No. 43 of 1983,

determines that the establishment of declared weeds and invasive plants during and after development should be prohibited. It is recommended that alien species be removed and destroyed, preferably burned, before commencement of any construction activities.

- High positive expectations regarding employment opportunities

Local employment and procurement should receive priority when embarking upon planning and construction activities. Contractors should be required to make use of local labour and suppliers where possible.

- Temporary employment creation

Where appropriate, labour intensive construction methods should be used. Where possible training of labour should take place to improve benefits to individuals well beyond this project. Use of emerging contractors should take place where possible.

OPERATIONAL PHASE

Direct impacts:

- Potential for the proposed development to impact on the character of the surrounding area and the visual quality of the landscape.

The potential of the proposed development to impact negatively on the character of the area is anticipated to be minimal, due to the already developed nature of the surrounding areas.

- Generation of waste by the proposed development

The proposed development is located near Steelpoort. The proposed development area has no municipal sewer point. It is proposed herewith that a septic tank will be installed on site and that a honey sucker will empty the septic tank on a weekly base.

- Leakage from underground fuel tanks resulting in pollution of land (soil) and underground water

All containment structures for polluted water should be lined to prevent seepage and pollution of groundwater.

Daily reconciliation of the volumes of petroleum products should be done to ensure early detection of a possible leak.

Leakage detectors and odour detectors should be installed. Checking for product losses should take place regularly. Any losses should be reported to the relevant oil company and relevant authorities within 14 days and the necessary remedial action taken.

Indirect impacts:

- Potential for the proposed development to impact on the character of the surrounding area and the visual quality of the landscape

The development of a filling station will serve to lessen the overall negative impact on the environment should the buildings be designed so that it blends in with the prevailing architectural character of the area.

Cumulative impacts:

- Development of the proposed filling station will impact positively on the local economy and land values
Change of land use from (relatively) natural veldt to a suburban environment will occur. The proposed development will create additional jobs for the local people.

DECOMMISSIONING

Direct impacts:

- Should the proposed site be decommissioned then a new site has to be identified for the development of the filling station.
Should the proposed site be decommissioned then a new site has to be identified for the development of the filling station. This will put more pressure to provide fuel in the community.

Indirect impacts:

- People will lose their jobs should decommissioning take place.
People will lose their jobs should decommissioning take place. This can have an impact on the crime in the area. Crime can increase due to job losses.

Cumulative impacts:

- Negative impact on local economy
Change of land use from (relatively) natural veldt to a suburban environment will occur. The proposed development will contribute towards the socio-economy of the area.

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

Ground clearance will take place during the construction of the filling station. Trees and other indigenous shrubs should be left intact.

The impact will not be significant after mitigation measures are implemented as set out in the report.

The proposed area is big enough to construct a filling station. This type of development will not have a significant impact on the environment after the mitigation measures are put in place.

No-go alternative (compulsory)

The demand for fuel will not be resolved should the filling station not be constructed.

Alternative B

Alternative C

For more alternatives please continue as alternative D, E, etc.

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

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

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

- **The mitigation measures stipulated in this report should be conveyed to contractors and persons responsible for construction.**
- **The mitigation section should be issued as a stand along document to all parties involved with the planning, implementation and operation of the proposed project.**
- **The applicant must monitor that all parties involved with the development of the institution are complying with the mitigation measures put out in this Basic Assessment Report.**
- **There should also be penalties for non-compliance.**

Is an EMPr attached?

YES

The EMPr must be attached as Appendix F.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

- Assessment of Alternatives
- Zoning Confirmation

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, **Anton von Well** declare that I –

- (a) act as the independent environmental practitioner in this application;
- (b) do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014;
- (c) do not have and will not have a vested interest in the proposed activity proceeding;
- (d) have no, and will not engage in, conflicting interests in the undertaking of the activity;
- (e) undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
- (f) will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- (g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the Department may be attached to the report without further amendment to the report;
- (h) will keep a register of all interested and affected parties that participated in a public participation process; and
- (i) will provide the Department with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:

Name of company:

Date: