

**DRAFT SCOPING REPORT FOR THE ENVIRONMENTAL AUTHORISATION  
FOR THE DEVELOPMENT OF A FUELLING STATION AND STORAGE ON  
PROPOSED PORTION 1 OF PORTION 115 OF THE FARM MALELANE  
389 JU, ERF 192 AND PORTION 138 OF THE FARM MALELANE NO. 389  
JU WITHIN NKOMAZI LOCAL MUNICIPALITY AND EHLANZENI DISTRICT  
MUNICIPALITY IN MPUMALANGA PROVINCE.**

**REFERENCE NO.:**

**JULY 2022**

Prepared for RER Investments Pty Ltd

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## EAP INFORMATION

REPORTS	COMPILER & REVIEWER	SIGNATURE & DATE
Draft Scoping Report (Public Review)	Thabelo Nelwamondo (Pr.Sci.Nat, Registered EAP) Shadi Mathobela (Pr.Sci.Nat)	24 July 2023
Draft Scoping report	Thabelo Nelwamondo (Pr.Sci.Nat, Registered EAP) Shadi Mathobela (Pr.Sci. Nat)	
Final Scoping Report	Thabelo Nelwamondo (Pr.Sci.Nat.; Reg. EAP) Shadi Mathobela (Pr.Sci.Nat)	

### The EAP herewith confirms:

- The correctness of the information provided in the reports;
- He inclusion of comments and inputs from stakeholders and I&Aps;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- That the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein.

SIGNED

\_\_\_\_\_

TT Nelwamondo (EAP)

Fecund Consultants Pty Ltd

24/07/2023

## EXECUTIVE SUMMARY

RER Investments Pty Ltd requires services of a team of professionals to develop a fuelling station and storage on Proposed portion 1 of portion 115 of the farm Malelane 389 JU, ERF 192 and Portion 138 of the farm Malelane No. 389 JU within Nkomazi Local municipality and Ehlanzeni District Municipality in Mpumalanga Province.

The proposed project entails the construction / development of a fuelling station, weigh bridge, parking, office, workshop and storage. The Fuel Storage Tanks will be above and below the ground. The proposed fueling station intend to install:

- Storage of 1 000 000L in total
- 200 000L Underground for the Unleaded Petrol (ULP)
- 800 000L above ground for diesel.

A borehole monitoring system will be implemented for the underground fuel storage.

The applicant provides road transportation of bulk fuel products and operates its own fleet of tankers. Thus, the main purpose of the project is to construct fuel tanks for the storage of fuel. The stored fuel will mainly be used by the applicant to fill the tanks of its own fuel transportation trucks.

Due to the existing land use, the site is in degraded condition and the natural vegetation composition has been transformed to a large degree. An Environmental Impact Assessment (EIA) will be conducted in terms of the 2014 regulations EIA Regulations as amended in 2017 which fall under the National Environmental Management Act 107 of 1998 (NEMA) to obtain Environmental Authorisation (EA). The EIA Regulations under the NEMA consist of two categories of activities namely:

- Activities which require a Basic Assessment Process, and
  - Activities which require both a Scoping and an EIA Report.
- The activities associated with the proposed project require a Scoping and an EIA Report for an EA and fall under Regulation GNR 325 (Listing Notice 2) of the

2014 EIA Regulations, as well as Regulation GNR 327 (Listing Notice 1) of the 2014 EIA Regulations as amended on 07 April 2017.

The Scoping and an EIA process is triggering Activity 4 of Listing Notice 2 (GNR 325) of the 2014 EIA Regulations as amended on 07 April 2017:

*'The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.'*

The key objectives of the Scoping Report are to:

- Facilitate the introduction of stakeholders to the project and to provide information regarding the project;
- Assist in the identification process of main stakeholders;
- Identify possible issues, concerns and values relating to the project;
- Identify important issues and impacts related to the project and set the stage for these impacts and issues to be addressed in the EIA;
- Identify all regulatory and legislative requirements;
- Define the process ahead and establish the extent of the subsequent EIA;
- Scope for issues that would be associated with this planned project;
- Conduct an initial investigation into biophysical and socio-economic aspects, focusing on key issues;
- Advise the proponent about the potential impacts (positive and negative impacts) of their planned development, as well as the implications for the design, construction and operational phases of the project;
- Facilitate public input on environmental and social matters.

## **PURPOSE OF THE SCOPING REPORT**

This Scoping Report pertains to presenting the findings of the scoping phase of the EIA process being undertaken towards the application for EA for the proposed fuelling station and storage development. The objectives of the scoping report are to:

- Identify the policies and legislation that are relevant to the activity;
- To motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- To identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking;

To provide preliminary identification and confirmation of the preferred site layout, through a detailed site layout process, which includes an impact and risk assessment process including cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment. The site layout investigations and selection of the preferred alternative will be refined and finalized in the subsequent EIA phase;

- To identify the key issues to be addressed in the detailed assessment phase;
- To agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required, as well as the extent of further consultation to be undertaken. This will assist in determining the impacts and risks the activity will impose on the preferred site and/or layout through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development infrastructure within the preferred site layout; and
- To identify preliminary measures to avoid, manage, or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored. These mitigation measures will be further refined during the EIA phase.

## **PUBLIC PARTICIPATION PROCESS**

The Public Participation Process (PPP) for the proposed development will be undertaken in accordance with the requirements of the NEMA EIA Regulations (2014) as amended, and in line with the principles of Integrated Environmental Management (IEM). The PPP will commence once the application has been acknowledged with (the reference number) with distributing the draft scoping report for public review, newspaper advert at a local newspaper, site visit for placements of site notices, consultation with the ward councillor, local and district municipality with call to register for a period of 30 days.

This scoping report will be made available for public review and comment for a period of 30 days in line with the legislative timeframes, Regulation 21 (1) of the EIA Regulation 2014, as amended. The comments received from I&AP's will be captured in a public consultation summary included in the final scoping report and appended in detail in the form of a Public Participation Report which will be submitted to the competent authority.

Comments received during this scoping report public review period will also be addressed and added to the public consultation summary as part of the final Scoping Report to be submitted to Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) for their review and decision-making. On acceptance of the scoping report from the competent authority (DARDLEA), an EIA Report, including an EMP, will also be compiled and presented for public comment as part of this EIA process during which time further stakeholder engagement will take place.

## **PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT**

A preliminary assessment was undertaken to identify all the potential risks and impacts associated with each phase of the proposed development of a fuelling station and storage. The background information from similar EIAs and specialist studies undertaken for the site were consulted as well as a screening of all the activities planned for the development to ensure that all the potential impacts have been

identified. Each of the identified risks and impacts for the project phases were assessed using the impact assessment methodology described in the body of the report. The impact assessment criteria include the nature, extent, duration, magnitude/intensity, reversibility, probability, public response, cumulative impact, and irreplaceable loss of resources.

The following impacts will be determined to have a potentially medium negative final significance:

- Loss/destruction of natural habitat;
- Displacement of faunal species;
- Altered hydrological regime;
- Erosion of wetlands;
- Archaeological and cultural heritage themes; and
- Palaeontology theme

In terms of positive impacts, the following key benefits have been identified:

- Employment opportunities; and
- Opportunities for local contractors and SMEs.

The positive and negative impacts will further be assessed during the EIA phase of the project. Furthermore, potential mitigation measures will be recommended and will be refined and supplemented based on input from the EAP, public consultation, and specialist assessments during the EIA phase of the project. The Environmental Management Programme (EMPr) prepared in the EIA phase will, include the identified appropriate mechanisms for avoidance and mitigation of the negative impacts and enhancing the positive.

## **ACCRONYMS**

CBA	Critical Biodiversity Area
DARDLEA	Department of Agriculture, Rural Development, Land and Environmental Affairs
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EDM	Ehlanzeni District Municipality
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
ESA	Ecological Support Area
EMPr	Environmental Management Programme
I&Ps	Interested and / or Affected Parties
IDP	Integrated Development Plan
NLM	Nkomazi Local Municipality
NEMA	National Environmental Management Act
NEMBA	National Environmental Management Biodiversity Act
PPP	Public Participation Process
SDF	Strategic Development Framework
SAHR	South African Heritage Resources Act
DWS	Department of Water and Sanitation



## DEFINITIONS

**Alien vegetation:** means all undesirable vegetation, defined as but not limited to, all declared category 1 and category 2 plants in terms of the Conservation of Agricultural Resources Act (43 of 1983) (CARA) amended regulations 15 and 16 as promulgated in March 2001.

**Applicant:** Any person who applies for and plans to undertake an activity or to cause such activity to be undertaken as contemplated in the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2010.

**Biodiversity:** The variability among living organisms from all sources including, terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part.

**Construction** activity refers to any action taken by the Contractor, his subcontractors, suppliers, or personnel in undertaking the construction work.

**Construction area(s):** refers to all areas used by the Contractor to carry out the required construction activities. This includes, all offices, accommodation facilities, testing facilities/laboratories, batching areas, storage & stockpiling areas, workshops, spoiling areas, access roads, traffic accommodation (e.g., bypasses), etc.

**Ecology:** The study of the inter relationships between organisms and their environments.

**Environment** means the surroundings within which humans exist and that are made up of:

- land, water, and atmosphere.
- micro-organisms, plant, and animal life.
- any part or combination of the above and the interrelationships among and between them; the physical, chemical, aesthetic, and cultural properties; and

- Conditions of the foregoing that influence human health and well-being.

**Environmental Impact:** refers to any change to the environment, whether desirable or undesirable, that would result directly or indirectly from any construction activity.

**Environmental Impact Assessment:** Assessment of the effects of a development on the Environment.

**Environmental Management Plan:** A legally binding working document, which stipulates environmental and socio-economic mitigation measures that must be implemented by several responsible parties throughout the duration of the proposed project.

**Hazardous material/substances:** refer to any substance that contains an element of risk and could have a deleterious effect on the environment.

**Road reserve:** refers to the proclaimed 150m wide corridor of land within which the road is located and that will be defined by the new fence line as part of the construction contract.

**Study area/Proposed development site:** Refers to the entire study area encompassing the total area of the land parcels as indicated on the study area map.

**Sustainable Development:** Development that has integrated social, economic, and environmental factors into planning, implementation and decision making, so as to ensure that it serves present and future generations.

**Vegetation rehabilitation:** refers to the re-establishment of locally indigenous vegetation with a similar species composition to that which naturally occurs in the area.

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## 1 PROJECT SUMMARY

**Table 1: Summary of the proposed project**

<b>Project Name</b>	The proposed development of a fuelling station and storage
<b>Site Location</b>	Proposed portion 1 of portion 115 of the farm Malelane 389 JU, ERF 192 and Portion 138 of the farm Malelane No. 389 JU within Nkomazi Local municipality and Ehlanzeni District Municipality in Mpumalanga Province.
<b>Surveyor-General 21 Digit Code</b>	TOJU00000000038900185 TOJU00120000019200000 TOJU00000000038900138
<b>Development footprint</b>	1.0197 Ha
<b>Project Description</b>	<p>The proposed project entails the construction / development of a fuelling station with weigh bridge, parking, office, workshop and storage</p> <p>The Fuel Storage Tanks will be above and below the ground. The proposed fuelling station intend to install:</p> <ul style="list-style-type: none"> <li>• Storage of 1 000 000L in total</li> <li>• 200 000L Underground for the Unleaded Petrol (ULP)</li> <li>• 800 000L above ground for diesel.</li> </ul>

	A borehole monitoring system will be implemented for the underground fuel storage.
<b>Proposed Layout</b>	Please refer to Appendix B for a copy of the proposed layout.

## 2 EAP INFORMATION

### 2.1. Details of Environmental Assessment Practitioners

A multi-disciplinary team of Environmental Assessment Practitioners contributed to the information presented in this document. Table 2 and Table 3 summarize the Environmental Assessment Practitioner's (EAP) expertise and involvement in the proposed project.

**Table 2: EAP details**

<b>Division/ Aspect</b>	<b>Key EAP</b>
<b>Coordination, Supervision/ Review, management</b>	Shadi Mathobela (Pr.Sci.Nat) Fecund Consultants Pty Ltd
<b>Public Participation and Report writing</b>	Thabelo Teresa Nelwamondo (Pr.Sci.Nat; Reg. EAP) Fecund Consultants Pty Ltd

#### 2.1.1. Expertise of the EAPs to carry out the scoping procedures

**Table 3: Expertise of the EAPs**

<b>EAP</b>	<b>Key Qualifications</b>
Shadi Mathobela	<b>Key qualifications:</b>



	<p>Key competencies and experience include development control applications (EA applications, environmental management and control applications).</p> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• BSc. (Hons) Applied Science: Environmental Technology</li> <li>• BSc. Natural Science</li> </ul> <p>Other training includes: Distribution of Risk Assessment Course Certificate and First Aid Level 1&amp;2 Course Certificate.</p> <p>She has more than 14 years working experience in public sector, mines and private sectors in the field of Environmental Sciences. She is registered with SACNASP as a Professional Natural Scientist. She has been exposed to a wide range of projects within the realm of planning professions. She has worked on various projects which includes; amongst others, Constructions, waste management, water monitoring, WULAs and mining.</p>
<p>Thabelo T. Nelwamondo</p>	<p><b>Key qualifications:</b></p> <ul style="list-style-type: none"> <li>• Environmental management &amp; research</li> <li>• Environmental Impact Assessment and report writing</li> <li>• Public Participation process</li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• BA Hons in Environmental Management.</li> <li>• Certificate in Environmental Compliance and Enforcement</li> </ul>

	<p>Other trainings includes: Quality Management Systems, Rangeland Management.</p> <p>She holds an Honours degree in Environmental Management majoring in Mining Geology and Ecology and Resource Management from the University of Venda (2014). She is registered with the South African Council of Natural Scientific Professions (SACNASP) as a Professional Natural Scientist and with EAPASA as Registered Environmental Assessment Practitioner.</p> <p>She has more than 8 years working experience in the field of Environmental Sciences. She has been exposed to a wide range of projects within the realm of planning professions. She has worked on various projects which includes; amongst others, Constructions, waste management, water monitoring, WULAs and mining.</p>
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### 2.1.2. Contact Details of the EAP

**Table 4: Fecund Consultants contact details**

<b>Name of the company</b>	Fecund Consultants Pty Ltd
<b>Telephone No.</b>	010 005 0628
<b>Postal Address</b>	345 Flower Street Capital Park, Gezina Pretoria, 0084
<b>Email address</b>	info@fecundconsultants.com

### 2.2. EAP Declaration

Please refer to Appendix C for the EAP declaration.

## 2.2. Details of the applicant

Table 5: Details of the applicant

<b>Aspect</b>	<b>Details</b>
<b>Client name</b>	RER Investments Pty Ltd
<b>Contact person</b>	Walter Gilfillan
<b>Postal address</b>	P O Box 362, Louis Trichardt, 0920
<b>Contact no.</b>	015 065 0216/ 082 592 1871
<b>Email address</b>	walter@alliancefuel.co.za

### 3 INTRODUCTION

Fecund Consultants was appointed by the Applicant [RER Investments (Pty) Ltd] to undertake the Environmental Impact Assessment (EIA) process for the proposed construction of a fuelling station and storage on Proposed portion 1 of portion 115 of the farm Malelane 389 JU, ERF 192 and Portion 138 of the farm Malelane No. 389 JU within Nkomazi Local municipality and Ehlanzeni District Municipality in Mpumalanga Province.

The applicant of the above mentioned property identified a need to develop the property by constructing a fuelling station and storage mainly to be utilized for filling of its own fleet of tankers.

The location of the property as well as the existing development trends in the surrounding areas suit the proposed development. Therefore the applicant wishes to apply for an Environmental Authorisation to the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) in order to establish the fueling station and storage on the said property. This Scoping Report focuses on the possible environmental impacts that the proposed development may have on the receiving environment.

#### 3.1. Objectives of the Scoping Report

The key objectives of the Scoping Report are to:

- Facilitate the introduction of stakeholders to the project and to provide information regarding the project;
- Assist in the identification process of main stakeholders;
- Identify possible issues, concerns and values relating to the project;
- Identify important issues and impacts related to the project and set the stage for these impacts and issues to be addressed in the EIA;
- Identify all regulatory and legislative requirements;
- Define the process ahead and establish the extent of the subsequent EIA;
- Scope for issues that would be associated with this planned project;

- Conduct an initial investigation into biophysical and socio- economic aspects, focusing on key issues;
- Advise the proponent about the potential impacts (positive and negative impacts) of their planned development, as well as the implications for the design, construction and operational phases of the project;
- Facilitate public input on environmental and social matters.

### 3.2. Project Schedule

The Scoping Report is undertaken in accordance with the National Environmental Management Act (NEMA) EIA Regulations, 2014. Please refer to Table 6 for the anticipated time frames in accordance to the NEMA EIA Regulations 2014.

The proposed schedule for the EIA process application will be determined mainly by the feedback from the responsible DARDLEA official, as linked to the timeframes listed below.

**Table 6: Summary of the proposed project schedule**

Project Phase	Description	Duration	Status
<b>Scoping Phase</b>			
Initial notification of the proposed project	I&Aps and Stakeholder Identification	30 days	On-going
Submit Application to DARDLEA	Application submitted to DARDLEA	30 days	Completed
Submit Draft Scoping Report	Draft Scoping Report submitted to DARDLEA	5 days	To be completed
Processing of comments and information received	Process comments and amend information	30 days	To be completed

Final scoping Report	Amendments and update PPP; Submission of final Scoping Report to DARDLEA	30 days	To be completed
<b>EIA Phase</b>			
Draft EIA and Draft EMPr submission/ amendments	Provision of information in terms of studies, impacts, mitigation measures and recommendations	30 days	To be completed
Final EIA and Final EMPr submission	Amendments and final submission	120 days	To be completed
Record of Decision	Granting/ refusal of Environmental Authorization (EA)	107 days	To be completed
Appeal process and notification of EA	Notifying I&As, including stakeholders of EA	35 days	To be completed

### **3.3. Authority consultation / identification of competent authority to assess the proposed project.**

The competent authority to assess the proposed fuelling station and storage development is the DARDLEA. The site does not have implications for international environmental commitments or relations; and will not take place within an area protected by means of an international environmental instrument, or the site is not a conservancy; a protected natural environment; a proclaimed private nature reserve; a natural heritage site; the buffer zone or transitional area of a biosphere reserve; or the buffer zone or transitional area of a world heritage site. Therefore, the competent authority has been correctly identified, based on the above reasons.

### 3.4. Applicable legislation

This process has been conducted in terms of the relevant legislative requirements, namely in terms of:

- National Environmental Management Act (Act No.107 of 1999)
- National Heritage Resources Act (Act No 25 of 1999)
- National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004)
- Occupational Health and Safety Act (Act 85 of 1993) 3.5.

### 3.5. Applicable Specialist Studies

The relevance of Activity 14 of Listing Notice 2 (GNR 325) of the 2014 EIA Regulations as amended on 07 April 2017 to the proposed project was assessed. Activity 14 of Listing Notice 2 (GNR 325) of the 2014 EIA Regulations as amended on 07 April 2017 reads as follows:

*"The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres."*

The entire proposed development site is highly disturbed and transformed by past and present human activities (development) and is entirely surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development would not have a negative effect in on any Red Data faunal species or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.

The site is located in Malelane town. Malelane is a farming town in Mpumalanga, South Africa situated on the N4 national highway. The farms in the region produce

sugarcane, subtropical fruit and winter vegetables. The town was proclaimed in 1949 after which it was named. The affected area covers an area of degraded land, containing several modern commercial building structures. No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site.

The proposed development will take place on land formerly altered by modern industrial/ commercial activities. Potential archaeological impact at the proposed site is considered to be non-existent. Underlying geology at the site consist of Swazian Goudplaats Gneiss, Makhutswi Gneiss and Nelspruit Suite occur from north to south. Further south, the younger Mpuluzi Granite, form the major base geology of the area. Archaian gneiss and granite weather into sandy soils in the uplands and clayey soils with high sodium content in the lowlands.

There are however no grave dressings or headstones visible. It is possible that it was either removed or that the graves are located at a different but nearby location. During the site visit, no graves or items of archaeological or palaeontological significance where observed. Should any items of archaeological or palaeontological significance be unearthed or found on the site during construction all activities will cease and a specialist will be appointed to investigate the finds. SAHRA will also be notified thereof.

With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment. No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.

Please note that a geohydrological study might be required because the site is close to a water course and also that there would be underground fuel tanks. A traffic impact assessment might also be required to determine and report on the traffic impact of the planned Rezoning of Business: Type 1 to commercial on the development property, in order to establish a fuelling station and storage.



## **4 BACKGROUND INFORMATION ON THE PROJECT**

The proposed project entails the construction / development of a fuelling station with weigh bridge, parking, office, workshop and storage. The Fuel Storage Tanks will be above and below the ground. The proposed fuelling station intend to install:

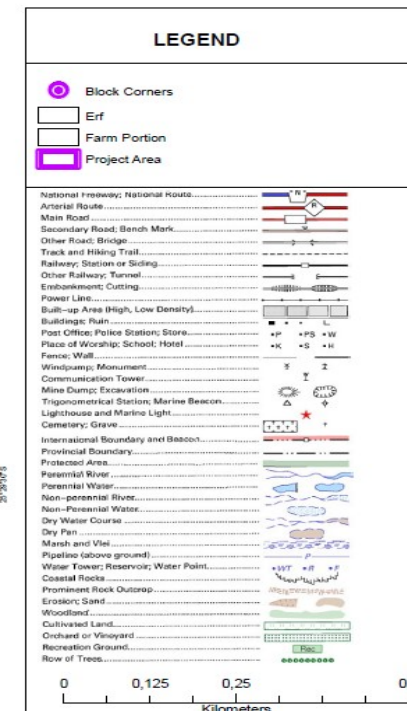
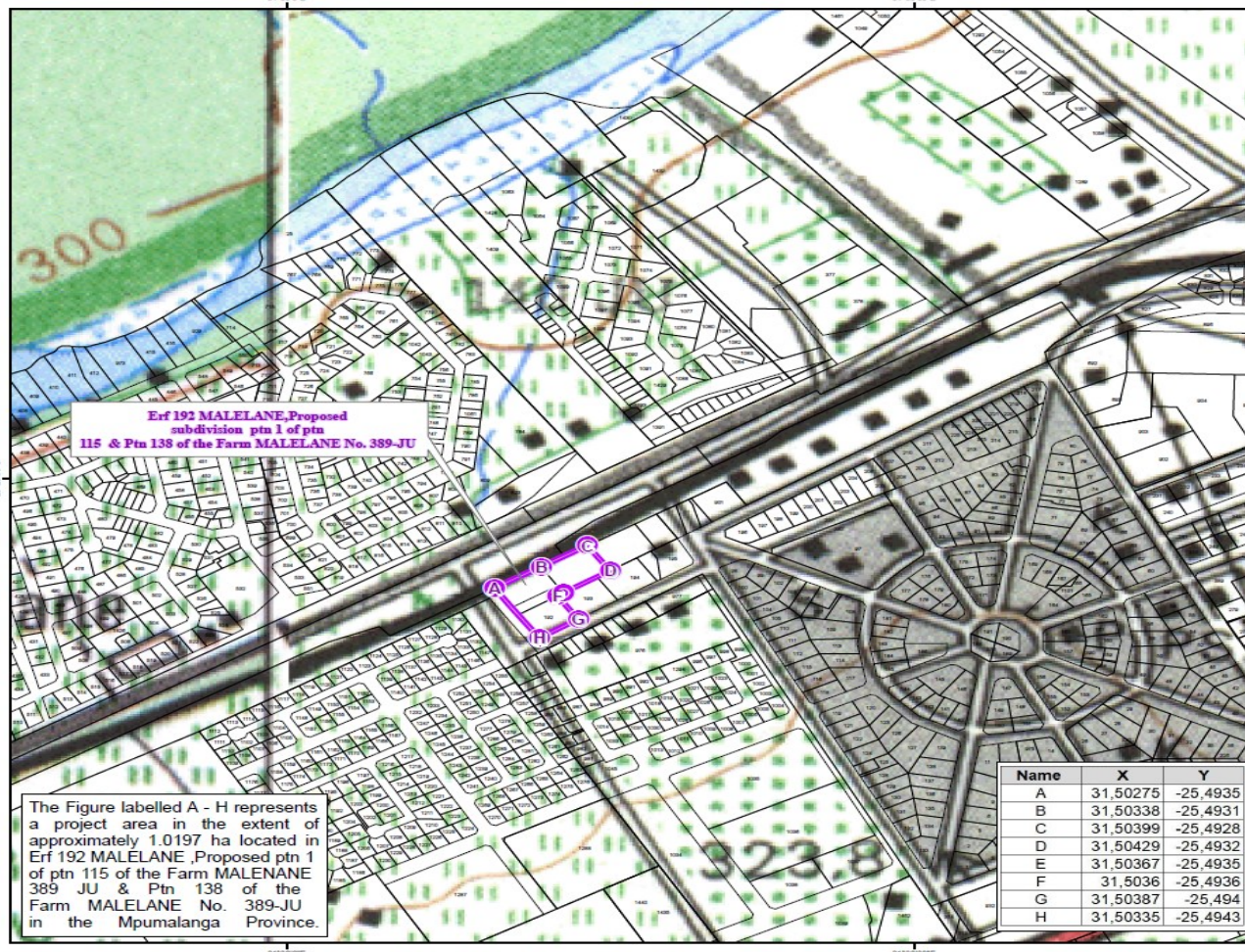
- Storage of 1 000 000L in total
- 200 000L Underground for the Unleaded Petrol (ULP)
- 800 000L above ground for diesel.

A borehole monitoring system will be implemented for the underground fuel storage.

### **4.1. Project location**

The proposed project is located in Proposed portion 1 of portion 115 of the farm Malelane 389 JU, ERF 192 and Portion 138 of the farm Malelane No. 389 JU within Nkomazi Local municipality and Ehlanzeni District Municipality in Mpumalanga Province. Please refer to the attached locality map on Appendix A.

Draft Scoping report for development for a fuelling station.



CLIENT COMPANY NAME		
Alliance Fuel Pty Ltd		
TITLE		
Filling Station Application		
	SCALE 1 : 6 000	REV . 0
	DATE 25/05/2023	A3
REFERENCE : WGS84		

Figure 1: Locality map of the proposed project

#### 4.2. Layout

The layout of the proposed diesel depot makes provision for the proposed fuel storage tanks, weigh bridge, parking, office, workshop as well as additional associated amenities. Access to the site is obtained from Lion Street.

Please refer to the proposed layout plan attached in Appendix B.

### 5 NEMA AND APPLICABLE LEGISLATION

The identified applicable listed activities as identified in the National Environmental Management Act (NEMA) Regulations for the proposed construction of the said diesel depot is depicted in Table 7 below

**Table 7: Description of identified Listed Activities**

<b>Regulation 984 2014, EIA, as amended on 7 April 2017 (Regulation no. 325)</b>	
<b>Listed Activity</b>	<b>Project activity Description</b>
LN2 (GNR 325) Activity No 4:  The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.	It is anticipated that more than 500 cubic meters of fuel will be stored on site.

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

### **Ablution Facility:**

- The site will make use of septic tanks for sewage disposal.
- 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.

An Environmental Impact Assessment (EIA) process is followed for activities listed in GN325 Listing Notice 2 of 2014 (as amended April 2017) and will therefore be prepared in accordance with the Environmental Impact Assessment Regulations, 2014 (Government Notice No. 326 as amended 7 April 2017) promulgated in terms of Sections 24(5) and 44 of the National Environmental Management Act (Act No. 107 of 1998). Application for Scoping and EIA has therefore been made to the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs.

## **6 PUBLIC PARTICIPATION PROCESS**

### **6.1. Background**

The objectives of the Public Participation Process (PPP) is to provide the local community, all applicable departments, the competent authority and potential / identified Interested and Affected Parties (IAPs) with adequate information and give them an opportunity to raise their issues and concerns. Methods used to inform the various IAPs of the project included direct contact, an on-site notice, hand delivered notifications, registered mail, and an advertisement in the local newspaper. All potential IAPs were included as required by Regulation 41(2)(e) and 41(6) of GN 326. Furthermore, key stakeholders (other than organs of state) were identified in terms of Regulation 41(2)(b) of GN 326.

### **6.2. Identification of possible IAPs**

The identified possible IAPs included the following:

- Nkomazi Local Municipality

- Ehlanzeni District Municipality
- Ward Councilor
- Department of Water and Sanitation
- Department of Mineral Resources and Energy
- Department Roads and Transport
- South African Heritage Resources Agency (SAHRA)
- Adjacent Landowners

Please note that notifications were sent out to the identified IAPs as listed above

### **6.3. Adjacent Land Owners**

Due to the residential/ small business nature of the surrounding environment related to this project all adjacent landowners were included as possible IAPs. All identified adjacent landowners have been provided with a notification letter. All registered parties were also provided with a copy of the Draft Scoping Report. Furthermore all registered IAPs were given an opportunity to comment on the said document.

### **6.5. Public Participation method going to be used**

#### **6.5.1. Consultation process**

##### a. Project initiation

A PPP under Regulation 41 published in Government Notice R.594 of 4 December 2014 in terms of NEMA, is undertaken as part of the Scoping Phase that included the following:

- Placement of site notices on various locations around the site as well as the entrance to the proposed site.
- Placement of an advertisement in the local newspapers (not yet done, we waits for the reference number),
- A notification and Background Information Document (BID) was sent to all potential Interested and Affected Parties (I&APs). This includes the adjacent

landowners and relevant authorities. A time period of 30 days will be given to the public to register and/ or send their issues and concerns regarding the proposed project to Fecund Consultants).

- The Draft Scoping Report will be sent to all registered I&AP's for their review and comments were logged and addressed from the I&AP's regarding the reports.

b. I&AP

Adjacent landowners and relevant stakeholders will be notified of the proposed project via written notifications and a BIDs. The main purpose of this is to inform the identified I&AP's of the project and obtain any issues related to the proposed project. A BID will be sent to all adjacent landowners and relevant stakeholders. The draft scoping report will sent to all potential I&AP's for their review.

c. Authorities

The following departments and / or organs of state will be consulted during the Public Participation process:

- Department of Forestry, Fisheries and Environmental Affairs (National)
- South African Heritage Resource Agency;
- Department of Water Affairs;
- Department of Agriculture, Rural Development, Land and Environmental Affairs (also competent authority);
- Nkomazi Local Municipality
- Ehlanzeni District Municipality
- SAHRA

**6.5.2. Register of I&APs / Stakeholders / Authorities contacted during the consultation process**

Please note that the table below will be completed with comments received during the PPP and correspondence from I&AP's regarding the project. These comments will be incorporated on the table below.:

**Table 8: I&AP contacted during the PPP**

<b>Issues raised</b>	<b>EAP/ Specialist's response</b>	<b>Applicant/ Date received</b>

## **7 NEED AND DESIRABILITY**

The applicant provides road transportation of bulk fuel products and operates its own fleet of tankers. The applicant identified the need to construct fuel tanks for the storage of fuel. The stored fuel will mainly be used by the applicant to fill the tanks of its own diesel transportation trucks before they cross the border.

The site is extremely well located for this type of development given numerous favourable locality aspects such as;

### **a. Access**

Easy access to the site can be obtained from Sand du Plessis Avenue.

### **b. Surrounding land uses**

The proposed development site is surrounded by municipal offices, housing, agriculture and light industrial land uses. This makes the proposed development suitable to the area.

## **8 MOTIVATION FOR ALTERNATIVES**

### **7.1. Preferred alternatives**

The preferred site is ideally located for the proposed Fuelling station and storage as easy access can be obtained from the Lion street. The proposed development site is surrounded by housing, municipal offices, agriculture and light industrial land uses.

The applicant owns two properties (ERF 192 and portion 138 of the farm Malelane 389 JU) and in the process of finalising to obtain legal ownership of the other portion (Proposed portion 1 of portion 115 of the farm Malelane 389 JU).

### **7.2. Alternative 2 - Locality**

As an alternative, the construction of a fuelling station and storage at another site, in an industrial part of Malelane can be considered. However, this option is not viable, as the applicant technically owns the preferred site.

No other alternatives will be discussed or considered for this EIA process or in this Scoping Report due to the above mentioned reasons.

### **7.3. No-go Alternative**

Not constructing a fuelling station and storage. The applicant will then have to buy diesel from other companies (at a higher price) and this will have cost implications.



## **9 DESCRIPTION OF THE RECEIVING ENVIRONMENT THAT MIGHT BE AFFECTED AND A DESCRIPTION OF ENVIRONMENTAL ISSUES, POTENTIAL IMPACTS AND CUMULATIVE EFFECTS.**

### **9.1. Topography**

#### **Ecoregion 3: Lowveld**

This hot and dry region is characterised by plains with a low to moderate relief and vegetation consisting mostly of Lowveld Bushveld types. Open hills with high relief and low mountains with high relief are present towards the west on the boundary with the North Eastern Highlands. In the north Mopane Bushveld and Mopane Shrubveld occur (Kleynhans et al., 2005).

The Vegetation Conditions derived from the PES-EIS model for this reach is calculated at 72.5% and is consistent with a Category C – moderately modified indicating a loss and change of natural habitat. The Riparian IHI was calculated at 81.04% rating this reach as a Category BC indicating a close to largely natural reach with few modifications most of the time. The overall Riparian Ecstatus consisting of a combination of the Vegetation Condition and the Riparian IHI was therefore determined as a Category C (72.5%) indicating that the riparian vegetation for this SQ reach is moderately modified (Roux, et al., 2018).

### **9.2. Conservation**

Vulnerable but Least Concern according to the MBSP Handbook. Target 19%. Some 17% statutorily conserved in the Kruger National Park. About the same amount conserved in private reserves, mainly in Selati, Klaserie, Timbavati, Mala Mala, Sabi Sand and Manyeleti Reserves. More than 20% already transformed, mainly by cultivation and by settlement development. Erosion is low to moderate.

The vegetation type represents tall shrubland with few trees to moderately dense low woodland on the deep sandy uplands. Dense thicket to open savanna occurs in the bottomlands. The dense herbaceous layer contains the dominant *Digitaria eriantha*,

*Panicum maximum* and *Aristida congesta* on fine-textured soils, while brackish bottomlands support *Sporobolus nitens*, *Urochloa mosambicensis* and *Chloris virgata*. At seep lines where convex topography changes to concave, a dense fringe of *Terminalia sericea* occurs with *Eragrostis gummiflua* in the undergrowth.

### **9.3. Geology**

From north to south, the Swazian Goudplaats Gneiss, Makhutswi Gneiss and Nelspruit Suite (granite gneiss and migmatite), and further south still, the younger Mpuluzi Granite (Randian) form the major basement geology of the area. Archaean granite and gneiss weather into sandy soils in the uplands and clayey soils with high sodium content in the lowlands.

The property is located on alluvium close to the river and residual towards the south. The topography consists of mid-slopes that slopes towards the north. The higher lying morphological units consist of red well-drained Hutton soils with loose stone in places (Figure 18). Most of the soils have abundance of stones and is the main impediment to land use capability; more than half of the site was found to have more than 40% stone in the soil matrix, but certain portion contains more than 70%.

### **9.4. Vegetation and Landscapes Features**

Consists of tall shrubland with few trees to moderately dense low woodland on deep sandy uplands. Also includes dense thicket to open savanna in the bottomlands and a dense herbaceous layer on fine- textured soils.

### **9.5. Catchment and Wetland Setting**

The Farm Malelane Estate is situated in the Crocodile River Sub-Water Management Area which form part of the Inkomati drainage system. The project site is located in quaternary catchment X24D and the Crocodile River is the northern boundary of the farm.

## **9.6. Hydrology**

The proposed study area falls under the Komati Catchment Area and quaternary catchment X24D. The quaternary Catchment receives 816.11 mm/annum. There are no NFEPA wetlands that have been noted around the site, however, two artificial wetlands are present to the east of the gas pipeline and south of the site. The Malelane River is noted on the western boundary of the site. There are no NFEPA Rivers that were noted in proximity to the site.

## **9.7. Archaeological and Cultural significance**

In general, historic sites are associated with colonial era white settlers, colonial wars, industrialisation, recent and contemporary African population settlements, and contemporary ritual sites dating to the last hundred years. However, recent historic period sites and features associated with the, African communities, settler and commercial farming communities are on record in the project area environment. The affected general landscape is associated with historical events such as white settler migration; this is confirmed by the predominant commercial farming by white farmers. No listed specific historical sites are on the proposed development sites.

The entire site earmarked for the proposed development is degraded from current land uses such as access road, Eskom distribution power line and sugarcane cultivation. There is no evidence suggesting any potential of recovering archaeological remains during earth moving activities. There is an established associated infrastructure development, roads and other associated infrastructures across the entire project receiving area. The field survey did not identify any cultural heritage resources or archaeological resources within an area earmarked for the proposed development.

Whether burial sites are known or not on record, from a heritage perspective, burial grounds and gravesites are accorded the highest social significance threshold. They have both historical and social significance and are considered sacred. Wherever they exist they may not be tempered with or interfered with during any proposed development. It is important to note that the possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever

present. Although the possibility of encountering previously unidentified burial sites is low along the area earmarked for development due to heavily degraded environment by means of agricultural activities, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected.

## **9.8. Air Quality and Pollution**

Air quality is defined to include noise and odour as well as addressing all sources of air pollution (i.e. point, area and mobile sources). The Mpumalanga Air Quality Management Plan has been developed to comply with the National Environmental Management: Air Quality Act, 39 of 2004 and more specifically, to provide guidance on Air Quality Management in the Ehlanzeni District Municipality. The Plan identifies air pollution sources in the proposed locations as follows:

- Railway line (Train);
- Agricultural activities;
- Biomass burning (veld fires);
- Domestic fuel burning (wood and paraffin);
- Vehicle emissions;
- Waste treatment and disposal;
- Dust from infrastructural development;
- Dust from unpaved roads; and
- Other fugitive dust sources such as wind erosion of exposed areas.

There are few sources of air pollutants within the immediate and around the proposed area. The motor vehicle along the N4 may result in elevated ambient concentrations of particulates and Nitrogen Oxides (NO<sub>2</sub>) at times. Dust generation is expected from the agricultural areas around the study area.

## **9.9. Fauna and Floral structure and composition**

Based on the preliminary desktop assessment, the study area is not located within a protected area, however, it is situated approximately 2 km south of the Kruger

National Park. According to the Mpumalanga Biodiversity Sector Plan (MBSP, 2014) the north eastern portion of the study area is located within an Ecological Support Area (ESA) local corridor, and a small portion of the power station and the majority of the proposed gas pipeline is located within an irreplaceable Critical Biodiversity Area (CBA). The remaining portions of the study area is located within areas classified as either "heavily modified" or "other natural areas".

The southern and a portion in the north east of the study area has a very high terrestrial sensitivity according to the National Web-based Environmental Screening Tool (2020). This is attributed to the CBA 1 and ESA within the study area, as well as being a study area for land-based protected areas expansion. The study area is considered to have a medium sensitivity for plant species due to the potential presence of the sensitive species such as *Pavetta zeyheri* subsp. *microlancea*. For the Animal Species theme, the majority of the study area is considered to have a medium sensitivity due to the potential presence of sensitive species such as Sensitive species 2 and Aves – *Circus ranivorus* (African marsh harrier) and *Sagittarius serpentarius* (Secretarybird). Scattered portions throughout the study area is considered to be of high animal sensitivity due to sensitive species such as Aves – *Ephippiorhynchus senegale* (saddle-billed stork).

The desktop analysis indicates that, several floral and faunal Species of Conservation Concern (SCC), were identified as having the potential to be observed within the study area, according to the Plant of Southern Africa online database and the Mpumalanga State of Environment Report. As these species are provincially important, should they be present within the study area, they will require rescuing and relocation to a similar habitat within the vicinity of the study area before any construction activities commences. Thus, a field assessment would be required to establish whether suitable habitat exists to support these species within the study area.

## **9.10. Soil and Land Capability**

The agricultural sector plays an essential role in the fight against poverty and securing food security for the people of Mpumalanga. The role of agriculture in supplying employment to unskilled workers, ensuring food security to rural people as well as

stimulating other sectors in the value chain such as manufacturing and trade makes it an important sector towards attainment of growth and development. The current land utilisation by agriculture is determined by the natural resources such as soils, water and climate, and land ownership. Land utilised for commercial farming is about 90% of the total farm land whilst for small scale/emerging farming is less than 10%. In terms of agricultural production, summer cereals and legumes (sunflower seed, sorghum, dry beans, soy beans, potatoes, cotton and maize) dominate then Highveld region, while sub-tropical and citrus fruit and sugar are grown extensively in the Lowveld (Malelane area).

## 10 POSSIBLE ENVIRONMENTAL IMPACTS, ISSUES AND CUMMULATIVE IMPACTS

The possible environmental impacts and issues were identified by evaluating different aspects of the receiving environment from both an urban and environmental point of view relating to the proposed development.

**Table 9: below is a summary of the preliminary possible environmental impacts identified at this stage of the project**

**Table 10: Potential Identified Impacts**

Possible Environmental Impacts	
Potential impacts	Preliminary significance of potential impacts
<b>Geology</b>	

<ul style="list-style-type: none"> <li>• Loss of topsoil. The correct management tools for the storage thereof will be needed during the construction phase.</li> <li>• The characteristics of the soil can be altered due to possible spillage/disturbance during construction activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Proper management along with implementation of best practices will ensure that the possible impacts on soil characteristics will be low.</li> </ul>
<ul style="list-style-type: none"> <li>• There will be a negligible cumulative impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible significance.</li> </ul>
<b>Climate</b>	
<ul style="list-style-type: none"> <li>• It is not expected that the proposed diesel depot will have an impact on the climate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<ul style="list-style-type: none"> <li>• It is not expected that the proposed diesel depot will have an impact on the climate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Air Quality</b>	
<ul style="list-style-type: none"> <li>• The air quality may be negatively impacted by vehicle emissions and dust, especially during the construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>• The impact can be low if the proper management measures are implemented during this phase.</li> </ul>
<ul style="list-style-type: none"> <li>• No impacts</li> </ul>	<ul style="list-style-type: none"> <li>• No impacts</li> </ul>
<b>Ground &amp; Surface Water</b>	
<ul style="list-style-type: none"> <li>• Ground and surface (if applicable) water could be contaminated during the construction &amp; operational phases due to spillages of hazardous chemicals and stormwater runoff from stockpiles.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts will be low should proper housekeeping and storm water management principles be implemented during the construction &amp; operational phase.</li> </ul>

<ul style="list-style-type: none"> <li>• There will be a negligible cumulative impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligible significance.</li> </ul>
<b>Land Use</b>	
<ul style="list-style-type: none"> <li>• The land-use is currently zoned as Business: Type 1 and is in the process of rezoning to commercial to cater for the fuelling station.</li> </ul>	<ul style="list-style-type: none"> <li>• Impact will be low as similar types of land-uses occur on nearby properties.</li> </ul>
<ul style="list-style-type: none"> <li>• Impact will be low as similar types of land-uses occur on nearby properties.</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> </ul>
<b>Vegetation</b>	
<ul style="list-style-type: none"> <li>• Loss of vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• The impact will be low-medium as the proposed development site is highly disturbed and transformed due to past and present human activities. The site is also surrounded by urban sprawl.</li> <li>• The loss of vegetation will be localized (to the construction site).</li> </ul>
<ul style="list-style-type: none"> <li>• The population in and around Malelane is expanding and therefore will not be any change in vegetation for since the area is already development</li> </ul>	<ul style="list-style-type: none"> <li>• Medium.</li> </ul>
<b>Animal Life</b>	
<ul style="list-style-type: none"> <li>• Due to the current operational activities on site, it is not believed that a large number of animal species use the site for feeding/ sleeping activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Medium – Low.</li> <li>• Some animal habitats will be disturbed. However, this will be localised.</li> </ul>



<ul style="list-style-type: none"> <li>The growth of the population, increasing urbanisation and expansion of cities will result of the relocation of many animals and the loss of habitats in these areas on the outer boundaries oftowns and cities as they expand.</li> </ul>	<ul style="list-style-type: none"> <li>Medium.</li> </ul>
<b>Cultural Heritage</b>	
<ul style="list-style-type: none"> <li>The proposed site and surrounding area is not known for elements of archaeological or palaeontological value.</li> </ul>	<ul style="list-style-type: none"> <li>Low.</li> </ul>
<ul style="list-style-type: none"> <li>No cumulative impacts on paleontological and archaeological assets are foreseen.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible significance.</li> <li>The impact is expected to be low as it is only temporary and can be managed by proper housekeeping on site during the construction</li> </ul>
<b>Construction phase.</b>	
<b>Noise</b>	
<b>Cumulative impacts</b>	<b>Preliminary significance Preliminary significance of cumulative impacts</b>
<ul style="list-style-type: none"> <li>The construction activities and specific activities that will be associated with the Construction Phase will result in elevated noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>The impact is expected to be medium during the construction activities. However, with the implementation of management tools such as the limiting of construction activities where possible to normal working hours, the significance of noise can be made bearable to surrounding land owners.</li> </ul>

<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from houses, agricultural and light industrial. It is therefore not foreseen that the proposed activities will have a potential increase in the ambient noise levelsof the area during the operational phase.</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<b>Aesthetics</b>	
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial.</li> <li>Possible impacts on the areas aesthetics during the construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>Medium, during the construction phase.</li> </ul>
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial</li> </ul>	<ul style="list-style-type: none"> <li>Low significance.</li> </ul>
<b>Noise</b>	
<ul style="list-style-type: none"> <li>The construction activities and specific activities that will be associated with the Construction Phase will result in elevated noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>The impact is expected to be medium during the construction activities. However, with the implementation of management tools such as the limiting of construction activities where possible to normal working hours, the significance of noise can be made bearable to surrounding land owners.</li> </ul>

<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial. It is therefore not foreseen that the proposed activities will have a potential increase in the ambient noise levelsof the area during the operational phase.</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<b>Aesthetics</b>	
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial.</li> <li>Possible impacts on the areas aesthetics during the construction phase.</li> </ul>	<ul style="list-style-type: none"> <li>Medium, during the construction phase.</li> </ul>
<ul style="list-style-type: none"> <li>The existing land uses in the area ranges from residential, agricultural and light industrial</li> </ul>	<ul style="list-style-type: none"> <li>Low significance.</li> </ul>
<b>Traffic Impacts</b>	
<ul style="list-style-type: none"> <li>The site is zoned Business: Type 1 and is in the process of rezoning to commercial to cater for the fueling station.</li> </ul>	<ul style="list-style-type: none"> <li>It is not anticipated that a high volume of additional vehicles will make use of the road towards theaccess road, as it is mainly the applicant's own tankers that will make use of the proposed diesel depot.</li> <li>The impact is expected to be low as additional traffic restrictions can be implemented depending on the findings of the Traffic Impact Assessment to be conducted.</li> <li>Given the relatively inaccessible location of the development it is inany event highly unlikely to attract other trips.</li> </ul>

<p>The site is zoned Business: Type 1 and is in the process of rezoning to commercial to cater for the fuelling station.</p>	<ul style="list-style-type: none"><li>• Low significance.</li><li>• The expected trip generation of the applied for facilities will be limited due to:<ul style="list-style-type: none"><li>- Diesel depot will mainly serve the developers own fleet of trucks;</li><li>- The site is relatively inaccessible from higher order roads.</li><li>- The overnight facilities will be used by employees</li></ul></li><li>• Considering the above, the change in land use will reduce the potential trip generation of the development and is not expected to generate in excess of 50 peak hour trips, with a result that capacity analyses are not required.</li></ul>
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## 11 ENVIRONMENTAL MANAGEMENT PROGRAMME

The EMP will be included in the EIA phase of the proposed development.

### 11.1. Objectives of the EMP

The EMP aims to fulfil the requirements in terms of the National Environmental Management Act (Act 107 of 1998), with the following objectives:

- To identify, predict and evaluate actual and potential impacts on the environment, socio-economic conditions and cultural heritage;

- To identify the risks and consequences and alternatives and options for mitigation of activities, in order to minimize negative impacts, maximize benefits and promote compliance with the principles of environmental management;
- To identify and employ the modes of environmental management best suited to ensuring that the activity is pursued in accordance with best environmental management practices;
- To be able to respond to unforeseen events; and
- To provide feedback on compliance.

### **11.2. Implementation of the EMPr**

The proponent, namely RER Investments (Pty) Ltd is responsible for the implementation of the EMPr. All contractors should be supplied with a copy of the EMPr and should ensure that construction staff adheres to the mitigation measures.

## **10. PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT**

### **10.1. Assessment Methodology**

The main objective of the EIA process will be to assess and quantify the potential impacts that were identified by the project team, specialists and I&AP during the Scoping Phase.

The concept of significance is at the core of impact identification, evaluation and decision-making during the EIA process and can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood), while impact significance is the value placed on the change by different affected parties (i.e. level of acceptability) (DEAT, 2002).

The significance is rated from Low to High as indicated in the table below with an explanation of the impact magnitude and a guide that reflects the extent of the proposed mitigatory measures deemed necessary.

#### **10.1.1. Determination of Consequence**

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence. For the purpose of determining the environmental significance in terms of consequence, the following factors were chosen: *Severity/Intensity, Duration and Extent/Spatial Scale*. Each factor is assigned a rating of 1 to 5, as described below.

##### **Determination of Severity**

Severity relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects impact on the biophysical and socio-economic environment.

**Table 11: Rating of severity**

Type of criteria	Rating				
	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	80-100%
Qualitative	Insignificant / Non-harmful	Small / Potentially harmful	Significant / Harmful	Great / Very harmful	Disastrous / Extremely harmful
Social/ Community response	Acceptable / I&AP satisfied	Slightly tolerable / Possible objections	Intolerable / Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate / High potential to mitigate impacts to level of insignificance / Easily reversible	Low cost to mitigate	Substantial cost to mitigate / Potential to mitigate impacts / Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate / Little or no mechanism to mitigate impact / Irreversible
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

### Determination of Duration

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

**Table 12: Rating of Duration**

Rating	Description
1: Low	One month
2: Low-Medium	Between 1 and 3 months (Quarter)
3: Medium	3 months to 1 year
4: Medium-High	1 to 10 years
5: High	More than 10 years

### Determination of Extent/Spatial Scale

Extent refer to the spatial influence of an impact be local (extending only as far as the activity, or will be limited to the site and its immediate surroundings), regional (will have an impact on the region), national (will have an impact on a national scale) or international (impact across international borders).

**Table 13: Example of calculating overall consequence**

Rating	Description
1: Low	Immediate, fully contained area
2: Low-Medium	Surrounding area
3: Medium	Within Business Unit area of responsibility
4: Medium-High	Within Development Boundary area
5: High	Regional, National, International

### Determination of Overall Consequence

Overall consequence is determined by adding the factors determined above and summarised below, and then dividing the sum by 4.



**Table 14: Example of calculating overall consequence**

Consequence	Rating
Severity	Example 4
Duration	Example 2
Extent	Example 4
SUBTOTAL	10
TOTAL CONSEQUENCE:(Subtotal divided by 3)	3.3

### 10.1.2. Likelihood

The determination of likelihood is a combination of Frequency and Probability. Each factor is assigned a rating of 1 to 5, as described below and in Table 6 and Table 7

#### Determination of Frequency

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

Table 15: Rating of frequency

Rating	Description
1: Low	Once a year or once/more during operation/
2: Low-Medium	Once/more in 6 Months
3: Medium	Once/more a Month
4: Medium-High	Once/more a Week
5: High	Daily

#### Determination of Probability

Probability refers to how often the activity/event or aspect has an impact on the environment.

Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom / highly unlikely
3: Medium	Infrequent / unlikely / seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

### Overall Likelihood

Overall likelihood is calculated by adding the factors determined above and summarised below, and then dividing the sum by 2.

Table 16: Example of calculating the overall likelihood

Likelihood	Rating
Severity	Example 4
Duration	Example 2
SUBTOTAL	6
TOTAL LIKELIHOOD:(Subtotal divided by 2)	3

### Determination of Overall Environmental Significance

The multiplication of overall consequence with overall likelihood will provide the environmental significance, which is a number that will then fall into a range of LOW, LOW-MEDIUM, MEDIUM, MEDIUM, MEDIUM, MEDIUM-HIGH or HIGH, as shown in the table below.

Table 17: Determination of overall environmental significance

Significance or Risk	Low	Low-Medium	Medium	Medium-High	High
Overall Consequence					

X	1 - 4.9	5 - 9.9	10 - 14.9	15 – 19.9	20 - 25
Overall Likelihood					

### Qualitative description or magnitude of Environmental Significance

This description is qualitative and is an indication of the nature or magnitude of the Environmental Significance. It also guides the prioritisations and decision-making process associated with this event, aspect or impact.

**Table 18: Description of the environmental significance and the related action required.**

Significance	Low	Low-Medium	Medium	Medium-High	High
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect.	Impact is of low order and therefore likely to have little real effect. Acceptable.	Impact is real, and potentially substantial in relation to other impacts. Can pose a risk to company	Impact is real and substantial in relation to other impacts. Pose a risk to the company. Unacceptable	Impact is of the highest order possible. Unacceptable. Fatal flaw.
Action Required	Maintain current management measures.  Where possible improve.	Maintain current management measures.  Implement monitoring and evaluate to determine potential increase in risk.	Implement monitoring. Investigate mitigation measures and improve management measures to reduce risk, where possible.	Improve management measures to reduce risk.	Implement significant mitigation measures or implement alternatives.

		Where possible improve			
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Should any fatal flaws be identified during the EIA process which will be indicated by a “high” significance rating, the activity related with the potential impact will undergo the “no-go” alternative (i.e. be excluded from the proposed project) if the impact cannot not be managed and/ or mitigated to acceptable levels.

## 12 EIA PROCESS

### 12.1. Tasks anticipated for the EIA process

The tasks that will be undertaken as part of the EIA process together with the manner in which it will be undertaken is summarised in the table below.

- Conduct baseline assessment at all the sites to determine the potential impact on the various spheres of the receiving environment.
- Consult with the SAHRA on the protection of cultural and heritage resources by a suitably qualified professional in terms of the National Heritage Resources Act.
- Conduct a Biodiversity Study to assess any such impacts.
- Conduct an Ecological Study to assess the impact on the ecosystem if any.
- Conduct an Archaeological Study to determine if the area holds any archaeological or historical value.
- Complete a concept design of the site.

### 12.2. Consultation and public participation process

The public participation process to be followed during the EIA process will include the following:

- Continued consultation with registered I&APs and the relevant Authorities;
- It is proposed to have one public meeting during the EIA phase for all registered I&AP.
- Updating of the I&AP database throughout the consultation process in order to keep record of all I&AP contacted during the process;
- A copy of the Draft Environmental Impact Assessment Report (EIAR), Environmental Management Programme report (EMPr) together with any specialist reports (if any) will be made available at a public space in Malelane area for public comment. All registered I&APs will be notified of the availability of the report and provided with a time period of 30 days to comment;
- A copy of these reports will also be made available to the authorities for a period of 30 days for comment;
- Compilation of a Comments & Response Report that will include all comments received during the process (including comments received on any draft reports) as well as the response taken by the EAP to address these comments where possible;
- Internal consultation with the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLEA) in terms of the final design / layout of the development.

### **12.3. Stages of Authority Consultation**

The DARDLEA will be consulted at stages when guidance is required in terms of clarification of listed activities, as well as correct processes to follow in the case of unusual projects or requests.

#### **12.4. Methodology of Assessing Environmental Issues**

The EIA Report will address the biophysical, as well as the socio-economic environments for all alternative site locations and activities. The information will be captured in the following manner:

- Site visits to determine the setting, visual character and land-uses in the area;
- Site surveys to address the identified impacts of the development on any plant and animal populations;
- The project plans will be superimposed onto the gathered baseline environmental information of identified impacts;
- The project plans will be revised according to the identified environmental sensitive areas to ensure the least environmental impact possible;
- Detailed discussions will be held with the client to address specific aspects of the development which could affect environment;
- IAPs will be consulted by phone, letters and meetings, if necessary, to capture additional issues of importance at this stage;
- Making recommendations and presenting guidelines for the mitigation of impacts addressed during this exercise;
- The option of not proceeding with the development will be considered and evaluated.

#### **12.5. Specific information required from the Competent Authority**

Additional relevant information will be provided on request of the Competent Authority.

#### **12.6. Consideration of Scoping Reports**

Steps to be taken by the Competent Authority after submission of the Scoping for EIA:

- Consider the Scoping Report;
- Accept the Scoping Report and the Plan of Study for EIA;

- Advise EAP to proceed with tasks contemplated in the Plan of Study for EIA;
- Request EAP to amend the Scoping Report or Plan of Study for EIA;
- Reject the Scoping Report or EIA if it:
  - does not contain material / information required;
  - has not taken the relevant guidelines into account.

### **13 CONCLUSION**

This draft Scoping Report focuses on the possible environmental impacts of the proposed development of a fueling station and storage on proposed portion 1 of portion 115 of the farm Malelane 389 JU, Erf 192 and portion 138 of the farm Malelane 389 JU within Nkomazi Local municipality in Mpumalanga Province.

The overall terms of reference for this scoping exercise are to:

- Scope for issues that would be associated with this proposal;
- Conduct an initial assessment of the biophysical and socio-economic aspects, thus focusing on key issues;
- Identify and advise the client about the potential impacts (negative as well as positive) of the planned development, and the implications for the design, construction and operation of the project, and
- Facilitate public input on environmental matters.

Identified issues documented in this report are related to the biophysical environment, which will require appropriate mitigation by the proponent as will be specified in the EIA Report.

The following potential issues were identified during the scoping phase:

- Soil suitability
- Impact on groundwater

- Visual impact
- Impact on air quality

The identified issues will be addressed and mitigated by means of specialist assessments, which will be included in the EIA Report.

- No historically significant building structure older than 60 years of age is present at the site. Existing roads already provide access to the site. The proposed development will take place on land formerly altered by modern industrial / commercial activities. Potential archaeological impact at the proposed site is non-existent. Superficial sediments are made up of residual soils of varying depth that are not considered to be palaeontologically significant. With the above in mind, it is recommended that the proposed development is exempted from a Phase 1 Heritage Impact Assessment.
- The proposed development site is highly disturbed and transformed by past and present human activities and is surrounded by urban sprawl. It was identified that no suitable habitat, on and surrounding the proposed development site for any Red Data faunal species and no rupicolous (living among, inhabiting, or growing on rocks), arboreal (pertaining to moving about, living in or among trees) or wetland habitats are present. The site was found to be disturbed and that the proposed development will not have a negative effect in on any Red Data faunal species, or any other faunal species found on site. No natural / indigenous vegetation is located on site. Therefore, no ecological assessment (including vegetation assessment) is required.
- No electrical or civil studies are required, as adequate electrical supply and civil services are available on site.
- Please note that a geohydrological study might be required in future, because the applicant intends to construct underground fuel tanks.
- A traffic impact assessment might also be required.



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- The Plan of Study for EIA stipulates the steps to be taken and the information to be included in the EIA Report, which will be submitted after approval of the Scoping Report.

## 14 REFERENCES

DEAT. (2002). Impact Significance. Integrated Environmental Management, Information Series 5.

Department of Energy . (2011). *Integrated Resource Plan 2010 - 2030*.

Mucina, L. & Rutherford, M.C (eds). (2006). The vegetation of South Africa, Lesotho and Swasiland Strelitzia 19. Pretoria: South African National Biodiversity Institute, Pretoria.

Le Roux, P.A.L., du Plessis, M.J., Turner, D.P., van der Waals, J. and Booyensi H.B. (2013). Veldboek vir die klassifikasie van Suid-Afrikaanse gronde. Bloemfontein: Sun Media. Management, Information Series 5.

StatsSA. (2016). Mid-year population estimates, P0302. Pretoria: Statistics South Africa.

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## **APPENDIX A: LOCALITY MAP**

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## **APPENIDX B: LAYOUT MAP**

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## **APPENDIX C: PUBLIC PARTICIPATION REPORT**

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## **APPENDIX D: DETAILS OF EAP**