

SCOPING REPORT FOR INTEGRATED ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL AUTHORISATION, WATER USE LICENSE APPLICATIONS FOR SAND ON FARM MIDDELBURG TOWN AND TOWNLANDS 287 JS; PORTION 27, STEVE TSHWETE LOCAL MUNICIPALITY MPUMALANGA PROVINCE

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COMPETENT AUTHORITY:



DMRE SAMRAD REF: MP 30/5/1/2/2/10335 MR

**REPORT FOR STAKEHOLDER TO COMMENT**



**mineral resources  
& energy**

Department:  
Mineral Resources and Energy  
**REPUBLIC OF SOUTH AFRICA**

## SCOPING REPORT

### FOR LISTED ACTIVITIES ASSOCIATED WITH MINING RIGHT

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998, INTERGRATED WATER USE LICENSE IN TERMS OF THE NATIONAL WATER ACT (1998) IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

NAME OF APPLICANT:	TOP ONE CONSTRUCTION AND GENERAL SERVICES Reg. No. 2003 / 002623 / 23
TEL NO.:	013 170 5511
E-MAIL:	<a href="mailto:admin@toponeconstruction.co.za">admin@toponeconstruction.co.za</a>
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FILE REFERENCE NUMBER SAMRAD:	MP 30/5/1/2/2/10335 MR

### **IMPORTANT NOTICE**

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”. Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment (EIA) and an Environmental Management Programme report (EMPr) in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment. In terms of section 16(3) (b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the Competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the Competent Authority to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore, please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused. It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

## OBJECTIVES OF THE SCOPING PROCESS

The objective of the scoping process through a consultative process is to:

- a) Identify the relevant policies and legislation relevant to the activity.
- b) Motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location.
- c) Identify and confirm the preferred activity and technology alternatives through an impact and risk assessment and ranking process.
- d) Identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of 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.
- e) Identify the key issues to be addressed in the assessment phase.
- f) Agree on the key issues addressed in the assessment phase; including the methodology to be applied, the expertise required as well as the extend of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site 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 footprint within the preferred site.
- g) Identify suitable measures to avoid, manage, or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

## Executive summary

Top One Construction and General Services (the applicant) has appointed Singo Consulting (Pty) Ltd (Consultant) to apply for Water Use License and to undertake an Environmental Impact Assessment and Environmental Authorization processes for the proposed mining of sand on portion 27 of the farm Middelburg Town and Townlands 287 JS located within the Steve Tshwete Local Municipality under the Middelburg Magisterial district, Mpumalanga Province. **DMRE Ref: MP 30/5/1/2/2/10335 MR.**

The extent of the mining right covers the above-mentioned farm portion (approximately 300 hectares) and the proposed project relate to the sand stripping method of mining which entails life of mine of thirty years. The sand stripping methodology is justified by simply mining the commodity by stripping and haulage. The sand is expected to be excavated up to 3m deep. There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage. A sand miner would require basic equipment such as a dozer to clear vegetation and build access roads, an excavator or front-end loader to scoop up sand from the deposit, and trucks to carry the sand away.

In order for the proposed mine to operate, the applicant is required to submit an application for a mining right with the Department of Mineral Resources and Energy (DMRE). In support of the application to obtain the mining right, the applicant is required to conduct a Scoping and Environmental Impact Assessment (S&EIA) for submission to the DMRE for adjudication. This assessment must include activities triggered under the Environmental Impact Assessment Regulations of 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (Act 107 of 1998).

### **Scoping and Environmental Impact Assessment process**

A S&EIA is conducted in two phases: Scoping and EIA compilation. The scoping phase will commence with the following activities once the application has been submitted with the competent authority:

- Identify interested and affected parties (I&APs) and stakeholders
- Identify relevant policies and legislation
- Consider the need and desirability of the project
- Consider alternative technologies and sites
- Identify the potential environmental issues
- Determine the level of assessment and public participation process required for the EIA phase
- Identify preliminary measures to avoid, mitigate or manage potential impacts

The objectives of the EIA phase will be to assess the potential impacts associated with the preferred project alternatives as per the terms of reference for the assessment set out in the scoping report. The EIA/EMPr report will document the assessment findings and detail the measures required to avoid, mitigate and/or manage the potential impacts.

The S&EIA process requirements are contained in Chapter 4, Part 3 of the NEMA Reg No 326 (amended on 7 April 2017). The EIA process can take up to 300 days to complete (87 days for the scoping phase, 106 days for the EIA phase, 107 days for competent authority to review).

## List of abbreviations

BID	Background Information Document
DEA	Department of Environmental Affairs
DMRE	Department of Mineral Resources and Energy
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EIAr	Environmental Impact Assessment Report
EMPr	Environmental Management Programme Report
GDARD	Gauteng Department of Agriculture and Rural Development
GIS	Geographic Information System
GN	Government Notice
HIA	Heritage Impact Assessment
I&AP	Interested & Affected Party
IBA	Important Bird Area
IWULA	Integrated Water Use Licence Application
ASAPA	Association of Southern African Professional Archaeologists
LoM	Life of Mine
MPRDA	Minerals and Petroleum Resources Development Act, 2002
Mtpa	Million tonnes per annum
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NWA	National Water Act, 1998 (Act No. 36 of 1998)
PPP	Public Participation Process
RoM	Run of Mine
SAHRA	South African Heritage Resources Agency
SANS	South African National Standard
SCC	Species of Conservation Concern
S&EIA	Scoping and Environmental Impact Assessment
WMA	Water Management Area

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## 1 INTRODUCTION AND BACKGROUND

Top One Construction and General Services (the applicant) has appointed Singo Consulting (Pty) Ltd (Consultant) to apply for Water Use License and to undertake an Environmental Impact Assessment and Environmental Authorization processes for the proposed mining of sand on portion 27 of the farm Middelburg Town and Townlands 287 JS located within the Steve Tshwete Local Municipality under the Middelburg Magisterial district, Mpumalanga Province. DMRE Ref: MP 30/5/1/2/2/10335 MR.

The extent of the mining right covers the above-mentioned farm portion (approximately 300 hectares) and the proposed project relate to the sand stripping method of mining which entails life of mine of thirty years. The sand stripping methodology is justified by simply mining the commodity by stripping and haulage. The sand is expected to be excavated up to 3m deep. There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage. A sand miner would require basic equipment such as a dozer to clear vegetation and build access roads, an excavator or front-end loader to scoop up sand from the deposit, and trucks to carry the sand away.

In order for the proposed mine to operate, the applicant is required to submit an application for a mining right with the Department of Mineral Resources and Energy (DMRE). In support of the application to obtain the mining right, the applicant is required to conduct a Scoping and Environmental Impact Assessment (S&EIA) for submission to the DMRE for adjudication. This assessment must include activities triggered under the Environmental Impact Assessment Regulations of 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (Act 107 of 1998).

The proposed mining method constitutes of various listed activities which have been listed within the scheduled activities in Government Notice Regulation No 324, 325 and 327 (amended 7 April 2017) and therefore require a full Scoping and EIA process to be followed. Prior to any listed activity being approved by the DMRE, it is required that an environmental process is undertaken, and a report is submitted to the relevant environmental authority for consideration.

The purpose of the S&EIA process is to ensure that potential environmental, economic and social impacts associated with operation and closure/rehabilitation of a project are identified, assessed and appropriately managed. This is done in two primary phases: the scoping phase and the impact assessment phase, both of which are discussed in more detail in the following:

### 1.1 Scoping phase

The scoping phase is conducted as a precursor to the EIA process, during which:

- Project and baseline environmental information is collated. Baseline information for the scoping report is gathered through visual inspections during field visits to the proposed project area and surroundings, desktop studies (including GIS mapping), and review of existing reports, guidelines and legislation.

- Landowners, adjacent landowners, local authorities, environmental authorities, and other stakeholders who may be affected by/or have an interest in the environmental impacts of the project, are identified.
- Interested and affected parties (I&APs) are informed about the proposed project.
- Environmental authorities are consulted to confirm legal and administrative requirements.
- Environmental issues and impacts are identified and described.
- Development alternatives are identified and evaluated, and non-feasible development alternatives are eliminated.
- The nature and extent of further investigations and specialist input required in the EIA phase is identified.
- The draft and final scoping reports are submitted for review by authorities, relevant organs of state and I&APs.
- Key I&AP issues and concerns are collated into an issues and response section for consideration in the EIA phase.

## 1.2 Environmental Impact Assessment process

After the initial scoping phase, the following EIA activities are completed:

- Specialist investigations are undertaken in accordance with the terms of reference established in the scoping assessment (plan of study for EIA appended to the scoping report). The scope for specialist work is determined by the nature and scale of the project impacts.
- Evaluation of development alternatives and identification of a proposed option.
- Assessment of existing impacts (no-go development option), environmental impacts that may be associated with the proposed project option, and cumulative impacts using the impact assessment methodology.
- Identification of mitigation measures to address the environmental impacts and development of actions required to achieve the mitigation required.
- Consultation with I&APs.
- Incorporation of public comments received during scoping into the Environmental Impact Assessment (EIA) and Environmental Management Programme report (EMPr), and finalisation of the EIA report.
- Issuing of the final EIA report for review.

- The requirements for the S&EIA process are contained in Chapter 4, Part 3 of the NEMA Reg No 326 (amended on 7 April 2017). The EIA process can take up to 300 days to complete (87 days for the scoping phase, 106 days for the EIA phase, and 107 days for the competent authority review).

## 2 APPLICANT AND ENVIRONMENTAL ASSESSMENT PRACTITIONER DETAILS

### 2.1 Details of the applicant

The following person may be contacted regarding this project:

**Table 1: Applicant’s contact details**

<b>NAME OF APPLICANT:</b>	TOP ONE CONSTRUCTION AND GENERAL SERVICES Reg. No. 2003 / 002623 / 23
<b>TEL NO.:</b>	013 170 5511
<b>E-MAIL:</b>	<a href="mailto:admin@toponeconstruction.co.za">admin@toponeconstruction.co.za</a>
<b>FAX NO.:</b>	086 514 4103
<b>POSTAL ADDRESS.</b>	P O Box 22339 Middelburg 1050
<b>PHYSICAL ADDRESS.</b>	Cnr Umkumaas & Umlaas Aerorand Middelburg 1050
<b>FILE REFERENCE NUMBER SAMRAD:</b>	MP 30/5/1/2/2/10335 MR

### 2.2 Details of the Environmental Assessment Practitioner

The applicant has appointed Singo Consulting as an independent EAP to conduct an S&EIA that is required to support the application for a mining right. Singo Consulting (Pty) Ltd has no vested interest in the proposed project and hereby declares its independence, as required by the EIA Regulations. Any queries regarding this S&EIA may be directed to the following EAPs at Singo Consulting:



**Table 2: EAP's contact details**

<b>Environmental assessment practitioner</b>	<b>Singo Consulting (Pty) Ltd</b>
<b>Contact person(s)</b>	Dr Kenneth Singo (Principal consultant) Deshney Mapoko (Consultant)
<b>Physical address</b>	Office No: 16 First Floor (South Block) Corridor Hill Crossing 09 Langa Crescent, Corridor Hill, eMalahleni, 1035
<b>Postal address</b>	Private Bag X7297, Postnet Suite 87, Witbank, 1035
<b>Contact number(s)</b>	Dr Kenneth Singo: 078 272 7839 / 072 081 6682 Deshney Mapoko: 072 116 1225
<b>Telephone number</b>	013 692 0041
<b>Fax</b>	086 5144 103
<b>Email(s)</b>	<a href="mailto:kenneth@singoconsulting.co.za">kenneth@singoconsulting.co.za</a> <a href="mailto:deshney@singoconsulting.co.za">deshney@singoconsulting.co.za</a>

### 2.2.1 Expertise of Environmental Assessment Practitioner

See Appendix 2 for EAP CVs.

### 2.2.2 Specialist studies

Specialists were identified and appointed during the scoping period and will be doing the Environmental Impact Assessment to address issues requiring further investigation. These studies involve the gathering of data relevant to identifying and assessing impacts that may occur as a result of the proposed project. The specialists will recommend appropriate mitigation/control or optimisation measures to minimise potential negative impacts and enhance potential benefits. The relevant specialist assessments will be made available during the EIA phase. The applicant has therefore appointed Singo Consulting (Pty) Ltd to complete the necessary environmental applications and oversee the various specialist studies:

**Table 3: Specialist studies identified**

<b>Specialist studies:</b>	
<b>Soil and land capability assessment</b>	Traffic Management Study
<b>Geohydrology study</b>	Heritage Impact Assessment
<b>Biodiversity study</b>	Surface water assessment and Floodline determination
<b>Rehabilitation Plan</b>	Integrated Water and Waste Management Plan

Wetland delineation and impact assessment (PES and EIS)	Surface and Storm Water Management Report
Geohydrological investigation, impact assessment and modelling	

### 2.3 Property description

The property description for the proposed for the sand mining is provided in

**Table 4: Property descriptions of the proposed Top One Construction and general Services sand Mine**

<b>Farm name</b>	Portion 27 of the farm Middelburg Town and Townlands 287 JS
<b>Application area (ha)</b>	Approximately 300 Hectares (ha)
<b>Magisterial district:</b>	Middelburg Magisterial District
<b>Local government municipalities</b>	Local Municipality: Steve Tshwete Local Municipality District Municipality: Nkangala District Municipality
<b>Distance and direction from nearest town</b>	Aproximately 3km North-East of Mhluzi Approximately 5.36 km North-West of Middelburg Approximately 13.46km South of Doornkop
<b>21-digit Surveyor General code for farm portion</b>	TOJS00000000287000027
<b>Locality map</b>	Locality map at a scale not smaller than 1:250000 (see Figure 1 and Figure 2).

### 2.4 Locality map

The proposed Mining Right area is located on portion of portion 27 of the farm Middelburg Town and Townlands 287 JS in Middelburg under the Jurisdiction of the Steve Tshwete local municipality within the Nkangala District Municipality, Mpumalanga Province. The project area is covering approximately 300 hectares (ha) in extent. The project area is located approximately 3km North-East of Mhluzi, approximately 5.36 km North-West of Middelburg and approximately 13.46km South of Doornkop. The national road N11 passes on the eastern boundary of the project area. The river, Komati-Olifants flows on the southern boundary of the project area. There is also an active mining permit operation (of Top One Construction) that are taking place on the North-Eastern part of the mining right area. See Figure 1 and Figure 2 below.

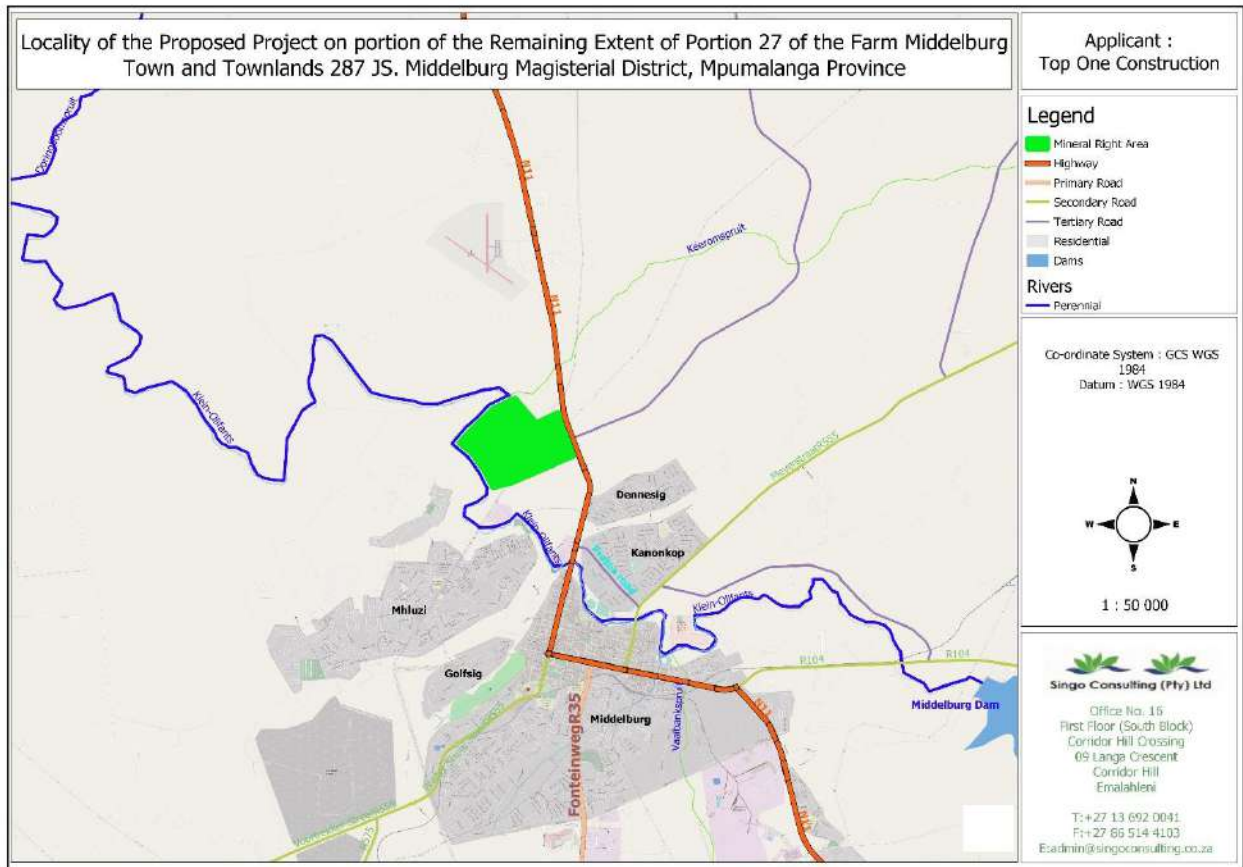


Figure 1: Project area locality

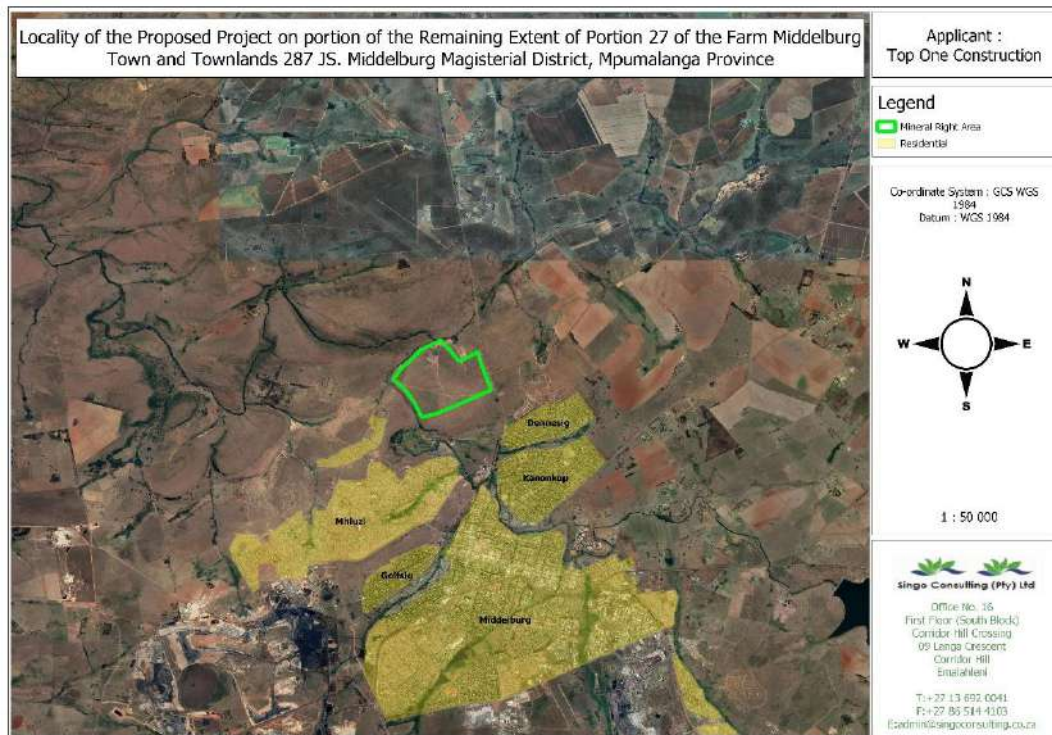


Figure 2: Google Earth view of the project area in green polygon

### **2.4.1 Landowner**

The mining right is applicable for the above-mentioned property. The attached Figure 3 below shows identified landowners using Windeed Search. The search shows the title deed of the owner in the proposed farm portion. As observed on the Windeed results below, the proposed properties belong to Steve Tshwete Local Municipality with title deed number: G361/1908

Printed: 2021/09/08 09:40

## Deeds Office Property

windeed

A LexisNexis® Product

**MIDDELBURG TOWN & TOWNLANDS, 287, 27 (REMAINING EXTENT) (MPUMALANGA)**

**GENERAL INFORMATION**

<b>Date Requested</b>	2021/09/08 09:38
<b>Deeds Office</b>	MPUMALANGA
<b>Information Source</b>	DEEDS OFFICE
<b>Reference</b>	-



\*\* This result is enriched with information from the WinDeed Database.

**PROPERTY INFORMATION**

<b>Property Type</b>	FARM
<b>Farm Name</b>	MIDDELBURG TOWN & TOWNLANDS
<b>Farm Number</b>	287
<b>Portion Number</b>	27 (REMAINING EXTENT)
<b>Local Authority</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>Registration Division</b>	JS
<b>Province</b>	MPUMALANGA
<b>Diagram Deed</b>	G361/1908
<b>Extent**</b>	3802.9134 H
<b>Previous Description</b>	-LG548/969
<b>LPI Code</b>	T0JS00000000028700027

**OWNER INFORMATION**

**Owner 1 of 2**

<b>Type**</b>	-
<b>Name</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>ID / Reg. Number</b>	-
<b>Title Deed</b>	G361/1908
<b>Registration Date</b>	1908/12/04
<b>Purchase Price (R)</b>	SECT 14
<b>Purchase Date</b>	-
<b>Share</b>	-
<b>Microfilm</b>	-
<b>Multiple Properties**</b>	NO
<b>Multiple Owners**</b>	NO

**Owner 2 of 2**

<b>Type**</b>	-
<b>Name</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>ID / Reg. Number</b>	-
<b>Title Deed</b>	-
<b>Registration Date</b>	-
<b>Purchase Price (R)</b>	-
<b>Purchase Date</b>	-
<b>Share</b>	-
<b>Microfilm</b>	-
<b>Multiple Properties**</b>	-
<b>Multiple Owners**</b>	-

Figure 3: Windeed search results of portion 27 of the farm Middelburg Town and Townlands 287 JS.

### 2.4.2 Description of current land cover

Land cover information is a crucial reference dataset that informs a variety of activities, including environmental planning and protection, development planning, economic development, compliance monitoring, enforcement and strategic decision making.

The proposed project area is utilised for multiple land uses including:

- Cultivated land
- Baren land
- Wetlands
- Natural vegetation
- Plantations

During the EIA Phase it is recommended to conduct a detailed study on all the waterbodies occurring around the site.

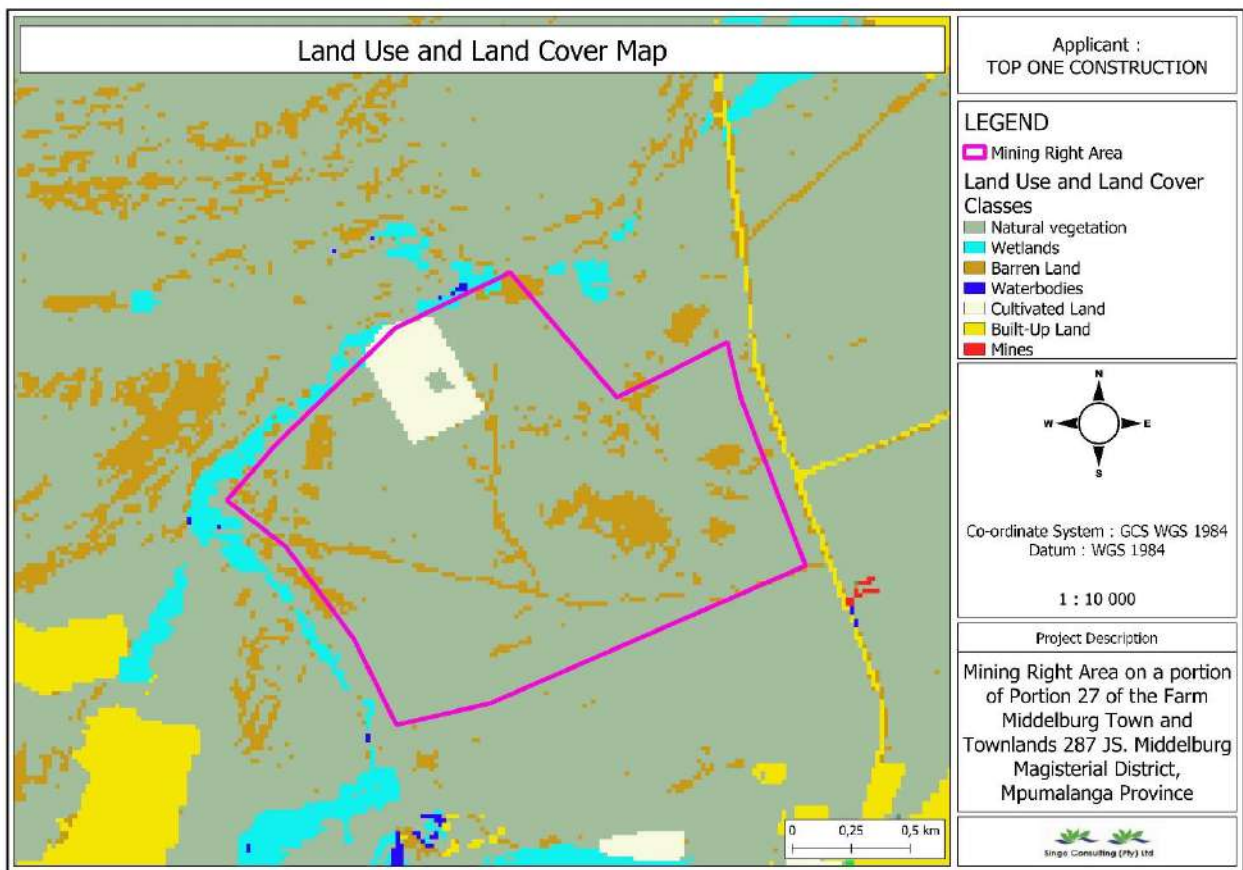


Figure 4: Land use map of the project area

### 2.4.3 Land claims

A land claim enquiry has been lodged to find out whether there are any possible land claims in process on the proposed farms and portions. Should there be any land claims in progress, further consultation will be undertaken during the EIA phase.

## 3 POLICY AND LEGISLATIVE CONTEXT

This section provides an overview of the governing legislation relating to the proposed project.

### 3.1 Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa, Act 108 of 1996 (as amended) Section 24 states that:

“Everyone has the right— (a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—

- a) prevent pollution and ecological degradation;
- b) Promote conservation; and
- c) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

### 3.2 Mineral and Petroleum Resources Development Act

The Mineral and Petroleum Resources Development Act, 2002 (MPRDA), outlines the procedural requirements an applicant must follow to obtain a mining right before proceeding with a mining project. Applicants are required to obtain Environmental Authorisation (EA) in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA).

The MPRDA is administered by the Department of Mineral Resources and Energy (DMRE) and governs the sustainable utilisation of South Africa’s mineral resources. The MPRDA aims to “make provision for equitable access to, and sustainable development of, the nation’s mineral and petroleum resources”.

In the event that the proposed activities require material (e.g. sand, gravel, aggregate) for construction, the MPRDA provisions may apply. In support of the application to obtain the mining right, the applicant is

required to conduct a Scoping Report, EIA/EMPr and I&AP consultation process, all of which must be submitted to the DMRE for adjudication.

### **3.3 National Environmental Management Act**

The aim of the NEMA is to provide for co-operative governance by establishing decision-making principles on matters affecting the environment. In terms of the NEMA EIA regulations, the applicant is required to appoint an EAP to undertake the EIA, as well as conduct the public participation process (PPP). In South Africa, EIAs became a legal requirement in 1997 with the promulgation of regulations under the Environment Conservation Act (ECA). Subsequently, NEMA was passed in 1998. Section 24(2) of NEMA empowers the Minister and any MEC, with the concurrence of the Minister, to identify activities which must be considered, investigated, assessed and reported on to the competent authority responsible for granting the relevant environmental authorisation.

On 21 April 2006, the Minister of Environmental Affairs and Tourism promulgated regulations in terms of Chapter 5 of the NEMA. These regulations, in terms of the NEMA, were amended in June 2010 and December 2014. The December 2014 NEMA regulations apply to this project. Mining activities officially became governable under the NEMA EIA in December 2014. The objective of the Regulations is to establish the procedures that must be followed in the consideration, investigation, assessment and reporting of the identified activities. The purpose of these procedures is to provide the competent authority with adequate information to refuse authorisation of activities which may impact negatively on the environment to an unacceptable degree. These procedures also aim to ensure that authorised activities are undertaken in a manner that responsibly manages environmental impacts.

In accordance with the provisions of Section 24 (5) and Section 44 of the NEMA, the Minister has published regulations (GN R. 982) pertaining to the required process for conducting EIAs in order to be considered for the issuing of EA. These regulations provide a detailed description of the EIA process to be followed when applying for EA for any listed activity.

The regulations differentiate between a simple Basic Assessment Process (required for activities listed in GN R. 983 and 985) and a more complete EIA process (activities listed in GN R. 984). In the case of this project, activities under GN R. 984 are triggered, requiring a full EIA process. On 7 April 2017, the NEMA 2014 regulations were amended, making activities triggered under GN R. 324, 325 and 327 applicable to this application.

A scoping and EIA process is reserved for activities with potentially significant impacts that are complex to assess. Scoping and EIA provides a mechanism for the comprehensive assessment of activities that are likely to have significant environmental impacts.



### 3.4 National Water Act

The National Water Act, 1998 (NWA) also has a role to play in regulating mining. Mining almost always uses water and/or has an impact on water resources, like streams, wetlands or rivers. The NWA is administered by the Department of Water and Sanitation (DWS).

The NWA Section 21 defines eleven water uses that require EA:

21 (a): taking water from a water resource

21 (b): storing water

21 (c): impeding or diverting the flow of water in a watercourse

21 (d): engaging in a stream flow reduction activity contemplated in section 36

21 (e): engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1)

21 (f): discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit

21 (g): disposing of waste in a manner which may detrimentally impact on a water resource

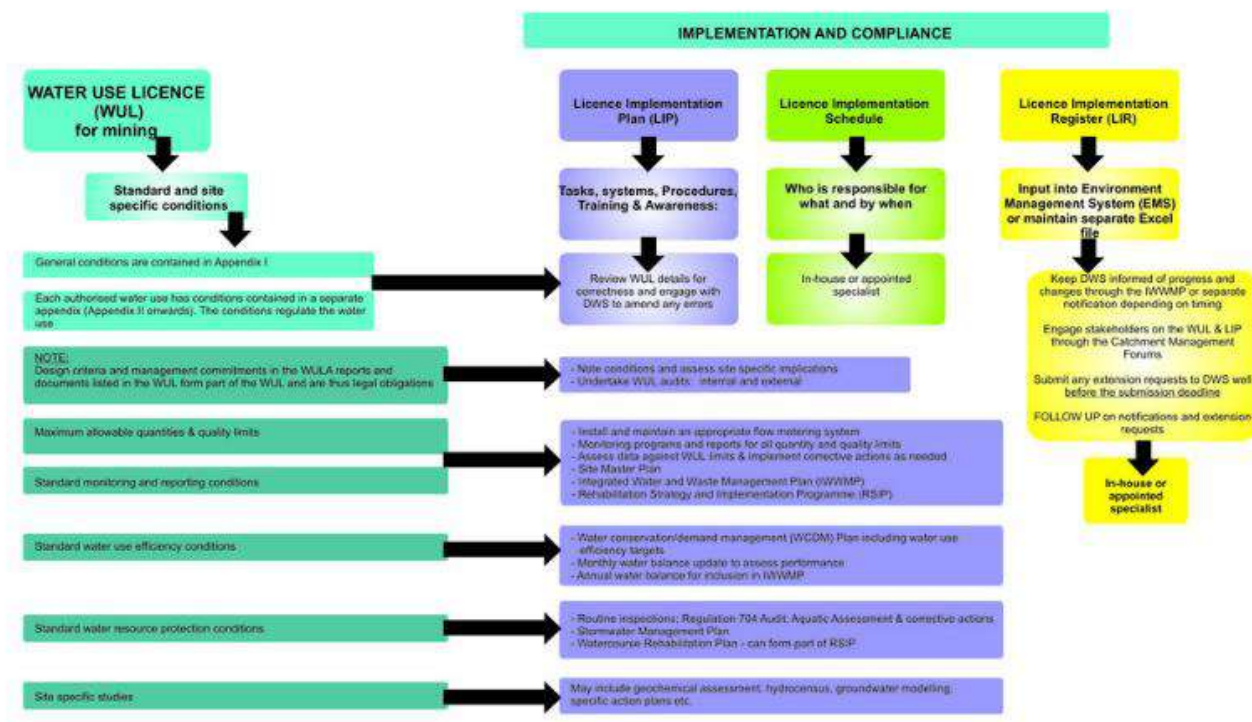
21 (h): disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process

21 (i): altering the bed, banks, course or characteristics of a watercourse

21 (j): removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people

21 (k): using water for recreational purposes. The proposed mine is in the process of applying for an Integrated Water Use Licence (IWUL) as per the water uses indicated.

**WATER USE LICENCE IMPLEMENTATION PLAN FOR MINING**



**3.5 National Environmental Management: Air Quality Act**

The National Environmental Management: Air Quality Act (NEM:AQA) (Act No. 39 of 2004 as amended) is the main legislative tool for the management of air pollution and related activities.

The objectives of the Act are to protect the environment by providing reasonable measures for:

- The protection and enhancement of the quality of air in the republic
- The prevention of air pollution and ecological degradation
- Securing ecologically sustainable development while promoting justifiable economic and social development
- Generally, to give effect to Section 24(b) of the constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and wellbeing of people

The NEM:AQA mandates the Minister of Environmental Affairs to publish a list of activities that result in atmospheric emissions and consequently cause detrimental effects on the environment, human health and social welfare. The Listed Activities and Minimum National Emission Standards were published on 22 November 2013 (Government Gazette No. 37054).

According to NEM:AQA, air quality management control and enforcement is the responsibility of local government, with district and metropolitan municipalities being the licensing authorities. Provincial government is primarily responsible for ambient monitoring and ensuring municipalities fulfil their legal obligations, with national government primarily as policy maker and coordinator. Each sphere of

government must appoint an Air Quality Officer responsible for coordinating matters pertaining to air quality management. Under the old Act, air quality management was the sole responsibility of national government, with local authorities only being responsible for smoke and vehicle emission control. The National Pollution Prevention Plan Regulations, which came into effect on 21 July 2017, tie in with The National Greenhouse Gas Emission Reporting Regulations, which took effect on 3 April 2017.

These regulations aim to prescribe the requirements that greenhouse gas (GHG) pollution prevention plans need to comply with (in terms of priority air pollutants), as per NEM:AQA. The regulations specify who needs to comply, and by when, and prescribes the content requirements. Mines do have an obligation to report on the GHG emissions under these regulations.

### **3.6 The National Heritage Resources Act**

The National Heritage Resources Act (NHRA) (Act 25 of 1999) stipulates that cultural heritage resources may not be disturbed without authorisation from the relevant heritage authority. Section 34(1) of the NHRA states that, “no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority...”.

The NHRA informs the identification, evaluation and management of heritage resources and, in the case of Cultural Resource Management (CRM), affected by development (as stipulated in Section 38 of NHRA) and those developments administered through the NEMA, MPRDA and NEMWA legislation. In the latter cases, the feedback from the relevant heritage resources authority is required by the state and provincial departments managing these Acts before any authorizations are granted for development. The last few years have seen a significant change towards the inclusion of heritage assessments as a major component of EIAs required by NEMA and MPRDA. This change requires an evaluation of the section of these Acts relevant to heritage. The NEMA 23(2)(b) states that an integrated environmental management plan should, “...identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage”.

Subsections (23) (2)(d), (29) (1)(d), (32) (2)(d) and (34) (b) require the (compulsory) inclusion of the identified cultural resources, the evaluation of the impacts of the proposed activity on these resources, the identification of alternatives and the management procedures for such cultural resources for each of the documents noted in the environmental regulations. Regulations under NEMA’s regulations on the Specialist Report requirements must be considered when compiling such a report.

The MPRDA and NEMA have similar definitions of “environment”. Both acknowledge cultural resources as part of the environment. Section 39(3)(b) of this Act specifically refers to the evaluation, assessment and identification of impacts on all heritage resources as identified in Section 3(2) of the NHRA. Section 40 of the same Act requires consultation with any state department administering any law relevant to such an application through Section 39 of the MPRDA. This implies the evaluation of Heritage Assessment Reports in Environmental Management Plans or Programmes by the relevant heritage authorities (Fourie, 2008b).

In accordance with the legislative requirements and EIA rating criteria, the regulations of the South African Heritage Resources Agency (SAHRA) and Association of Southern African Professional Archaeologists (ASAPA) have been incorporated to ensure that a comprehensive and legally compatible Heritage Impact Assessment (HIA) is compiled.

### 3.7 National Environmental Management: Biodiversity Act

The overarching aim of the National Environmental Management: Biodiversity Act (No 10 of 2004) (NEM:BA), within the framework of NEMA, is to provide for:

- The management and conservation of biological diversity in South Africa and of the components of such diversity.
- The use of indigenous biological resources in a sustainable manner.
- The fair and equitable sharing, among stakeholders, of benefits arising from bioprospecting involving indigenous biological resources.
- The South African National Biodiversity Institute (SANBI) was established on 1 September 2004 through the signing into force of the NEM:BA, its purpose being (*inter alia*) to report on the status of the country's biodiversity and the conservation status of all listed threatened or protected species and ecosystems.
- Other objectives include the identification, control and eradication of declared weeds and alien invaders in South Africa. These are categorised according to one of the following categories, and require control or removal:
  - Category 1a Listed Invasive Species: Category 1a Listed Invasive Species are those species listed as such by notice in terms of section 70(1)(a) of the Act as species which must be combated or eradicated.
  - Category 1b Listed Invasive Species: Category 1b Listed Invasive Species are those species listed as such by notice in terms of section 70(1)(a) of the Act as species which must be controlled.
  - Category 2 Listed Invasive Species: Category 2 Listed Invasive Species are those species listed by notice in terms of section 70(1)(a) of the Act as species which require a permit to carry out a restricted activity within an area specified in the Notice or an area specified in the permit, as the case may be.
  - Category 3 Listed Invasive Species: Category 3 Listed Invasive Species are species that are listed by notice in terms of section 70(1)(a) of the Act, as species which are subject to exemptions in terms of section 71(3) and prohibitions in terms of section 71A of Act, as specified in the Notice.
  - The provisions of this Act have been considered and, where relevant, incorporated into the proposed mitigation measures and requirements of the EMPr. It is also appropriate to undertake a Fauna and Flora Impact Assessment for developments in an area that is considered ecologically sensitive which require environmental authorisation in terms of NEMA, with such Assessment taking place during the EIA phase.

### 3.8 The Conservation of Agricultural Resources Act

This Act informs the utilisation of the natural agricultural resources in South Africa to promote soil, water and vegetation conservation, as well as combat weeds and invader plants.

### 3.9 Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)

The Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA) is a framework law, which means that the law provides broad principles for a set of provincial laws that will regulate planning for the country. The Act introduces provisions to cater for development principles; norms and standards; inter-governmental support; Spatial Development Frameworks (SDFs) across national, provincial, regional and municipal areas; Land Use Schemes (LUS); and municipal planning tribunals.

SPLUMA also provides clarity on how planning law interacts with other laws and policies. It is a uniform, recognisable and comprehensive system that addresses the past spatial and regulatory imbalances and promotes optimal exploitation of minerals and mineral resources. SPLUMA achieves this by strengthening the position of mining right holders when land needs to be rezoned for mining purposes. SPLUMA’s impact on optimal exploitation is particularly evident where conflict exists between mining right holders and landowners. Economic and policy considerations, as well as practical necessities, often motivate the state to grant mining rights to entities other than landowners. SPLUMA is a new national framework Act that provides clear principles and standards for provincial and local governments to formulate their own new spatial planning and land use policies. The new provincial legislation can regulate, among other things, land development, land use management, spatial planning and municipal planning.

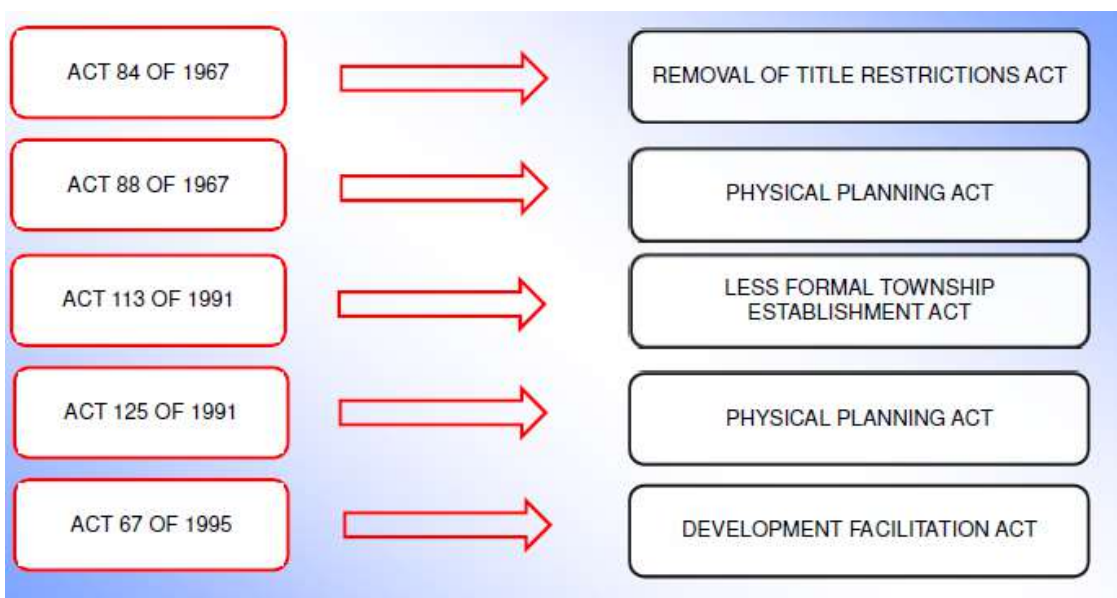


Figure 5: Repealed legislation as a result of SPLUMA

### **3.10 Environment Conservation Act, 1989 (Act 73 of 1989) – Noise control regulations**

In terms of section 25 of the ECA, the national Noise Control Regulations (GN R154 in Government Gazette No. 13717 dated 10 January 1992) were promulgated. The NCRs were revised under GN R. 55 of 14 January 1994 to make it obligatory for all authorities to apply the regulations. The Gauteng Province promulgated provincial regulations: Noise Control Regulations of Gauteng 1999, (Provincial Gazette, Extraordinary no 75 of August 1999). The noise control regulations must be considered in relation to the potential noise that may be generated during the construction and decommissioning phases of the proposed project. The two key aspects of the noise control regulations relate to disturbing noise and noise nuisance.

Section 4 of the regulations prohibits a person from making, producing or causing a disturbing noise, or allowing it to be made produced or caused by any person, machine, device or apparatus or any combination thereof. A disturbing noise is defined in the regulations as “a noise level which exceeds the zone sound level or if no zone sound level has been designated, a noise level which exceeds the ambient sound level at the same measuring point by 7 dBA or more”.

Section 5 of the noise control regulations prohibits the creation of a noise nuisance. A noise nuisance is defined as “any sound which disturbs or impairs or may disturb or impair the convenience or peace of any person”. Noise nuisance is anticipated from the proposed project particularly to those residents that are situated near the project sites.

South African National Standard 10103 also applies to the measurement and consideration of environmental noise and should be considered in conjunction with these regulations. A noise specialist study is proposed for the EIA process.

### **3.11 Noise standards**

The following South African Bureau of Standards (SABS) requirements relate to noise from mines, industry and roads:

- South African National Standard (SANS) 10103:2008. “The measurement and rating of environmental noise with respect to annoyance and to speech communication”.
- SANS 10210:2004. “Calculating and predicting road traffic noise”.
- SANS 10328:2008. “Methods for environmental noise impact assessments”.
- SANS 10357:2004. “The calculation of sound propagation by the Concave method”.
- SANS 10181:2003. “The Measurement of Noise Emitted by Road Vehicles when Stationary”.
- SANS 10205:2003. “The Measurement of Noise Emitted by Motor Vehicles in Motion”.

The relevant standards use the equivalent continuous rating level as a basis to determine what is acceptable. The levels may take single event noise into account, but single event noise by itself does not determine whether noise levels are acceptable for land use purposes. With regards to SANS 10103:2008, the recommendations are likely to inform decisions by authorities, but non-compliance with the standard will not necessarily render an activity unlawful. The noise assessment will take these noise standards and impacts into consideration.

## 4 SCOPE OF THE PROPOSED OVERALL ACTIVITY

### 4.1 Mining operations

The mining right area is proposed to take place on portion 27 of the farm Middelburg Town and Townlands 287 JS with an extent area of approximately 300 ha. The proposed project relate to the sand stripping method of mining which entails life of mine of thirty years. The sand stripping methodology is justified by simply mining the commodity by stripping and haulage. The sand is expected to be excavated up to 3m deep. There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage. A sand miner would require basic equipment such as a dozer to clear vegetation and build access roads, an excavator or front-end loader to scoop up sand from the deposit, and trucks to carry the sand away.

### 4.2 Listed and specified activities

The applicant has applied for a mining right and EA for the development of a mine and supporting infrastructure on the farm identified. The listed activities require EA in terms of the NEMA EIA Regulations GN R. 326/324/325/327 amended on 7 April 2017 and the the water uses in terms of Section 21 are indicated in the following tables.

**Table 5: Listed activities according to NEMA requiring environmental authorisation**

Government notice	Activity number	Description
Listing Notice 1: R.324 on 7 April 2017	9	The development of infrastructure exceeding 1,000 m in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 m or more; or (ii) with a peak throughput of 120 l per second or more; excluding where—  (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.
	10	The development of infrastructure exceeding 1,000 m in length for the bulk transportation of water or storm water –  a) with an internal diameter of 0,36 m or more; or b) with a peak throughput of 120 l per second or more



		<b>The internal reticulation of water still needs to be finalised.</b>
12	<p>The development of—</p> <ul style="list-style-type: none"> <li>a) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 m<sup>2</sup>; or</li> <li>b) infrastructure or structures with a physical footprint of 100 m<sup>2</sup> or more; where such development occurs – <ul style="list-style-type: none"> <li>• within a watercourse;</li> <li>• in front of a development setback; or</li> <li>• if no development setback exists, within 32 m of a watercourse, measured from the edge of a watercourse</li> </ul> </li> </ul> <p><b>This will be confirmed during the EIA.</b></p>	
14	<p>The development and related operation of facilities or infrastructure for the storage/storage and handling of dangerous good, where such storage occurs in containers with a combined capacity of 80 m<sup>3</sup> or more, but not exceeding 500 m<sup>3</sup>.</p> <p><b>Storage of diesel and other hydrochemicals.</b></p>	
19	<p>The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 m<sup>3</sup> from a watercourse.</p> <p><b>Mining activities associated with the physical mining activities, construction of wetland and stream crossing or any other related mining activities that trigger this activity – will be confirmed during the EIA.</b></p>	
24	<p>The development of a road –</p> <ul style="list-style-type: none"> <li>a) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or</li> <li>b) with a reserve wider than 13,5 m, or where no reserve exists where the road is wider than 8 m</li> </ul> <p><b>Construction of mining road infrastructure, which will include service, access and haul roads as part of the proposed mining activities.</b></p>	
28	<p>Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 1 April 1998 and where such development:</p>	

		<p>a) will occur inside an urban area, where the total land to be developed is bigger than 5 ha; or</p> <p>b) will occur outside an urban area, where the total land to be developed is bigger than 1 ha.</p>
	31	<p>The decommissioning of existing facilities, structures or infrastructure for –</p> <p>a) any development and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014</p> <p><b>This will be applicable for existing infrastructure on the properties – will be confirmed during the EIA.</b></p>
	56	<p>The widening of a road by more than 6 m, or the lengthening of a road by more than 1 km –</p> <p>a) where the existing reserve is wider than 13,5 m; or</p> <p>b) where no reserve exists, where the existing road is wider than 8 m</p> <p><b>Upgrades to existing roads – to be confirmed during the EIA.</b></p>
Listing Notice 2: R.325 on 7 April 2017	4	<p>The development and related operation of facilities or infrastructure, for the storage/storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 m<sup>3</sup>.</p> <p><b>Storage of diesel and other hydrocarbons – will be confirmed during the EIA phase.</b></p>
	15	<p>The clearance of an area of 20 ha or more of indigenous vegetation.</p> <p><b>Needs to be confirmed from the ecological assessment.</b></p>
	17	<p>Any activity (including the operation of that activity) which requires a mining right as contemplated in Section 22 of the MPRDA, including –</p> <p>a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or</p> <p>b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.</p>
	24	<p>The extraction or removal of peat or peat soils, including the disturbance of vegetation or soils in anticipation of the extraction or removal of peat</p>

		<p>or peat soils, but excluding where such extraction or removal is for the rehabilitation of wetlands in accordance with a maintenance management plan.</p> <p><b>Needs to be confirmed by soil capability study and wetland specialist.</b></p>
<p><b>Listing Notice 3: R.327 on 7 April 2017</b></p>	4	<p>Mpumalanga i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in Chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an international convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; or (gg) Areas within 10 km from national parks or world heritage sites or 5 km from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas, where such areas comprise indigenous vegetation; or ii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.</p>
	10	<p>Mpumalanga i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in Chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an international convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; (gg) Areas within 10 km from national parks or world heritage sites or 5 km from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, where such areas comprise indigenous vegetation; or (hh) Areas within a watercourse or wetland, or within 100 metres of a watercourse or wetland; or ii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.</p>
	12	<p>Mpumalanga i. Within any critically endangered or endangered ecosystem listed in terms of Section 52 of the NEM:BA or prior to the publication of such a list, within an area that has been identified as</p>

		critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; or iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or proclamation in terms of NEMPAA.
	14	Mpumalanga i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) National Protected Area Expansion Strategy Focus areas; (cc) World Heritage Sites; (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (ee) Sites or areas identified in terms of an international convention; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Core areas in biosphere reserves; or (hh) Areas within 10 km from national parks or world heritage sites or 5 km from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve, where such areas comprise indigenous vegetation; or ii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose.

**Table 6: Water uses according to NWA requiring environmental authorisation**

Section 21 water use	Description
21 (a)	Abstraction of water
21 (b)	Storage of water
21 (c)	Impeding or diverting the flow of water in a watercourse
21 (g)	Disposing of waste in a manner that may detrimentally impact a water resource
21 (i)	Altering the bed, banks, course or characteristics of a watercourse
21 (j)	Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or the safety of people

## 5 NEED AND DESIRABILITY OF PROPOSED ACTIVITIES

This section examines the need and desirability of the proposed sand mine project, and the importance of sand as a resource and the desirability of the mining operations at the proposed study area.

### 5.1 Project selection area

Top One Construction has an existing mining permit of 5 Ha. The company has a renewal of one year dated (10-07-2021 to 10-07-2022). The area surrounding the mining permit (DMRE Ref 11701 MP) has more sand hence the requirement to lodge a mining right application on the remaining extent of portion 27 of the farm Middelburg Town and Townlands 287 JS. Sand is fine grained sand that is mined at this farm and it can be used for a variety of things, as it mostly used in the construction industry. Target market for this commodity is the members of the surrounding communities and businesses around the area.

The applied sand mine offers several economic benefits; mine revenue will facilitate fund allocation to local economic development through the implementation of projects identified on the Social and Labour Plan. Local contractors and businesses will benefit from supplying the mine with goods and services. The applicant is fully committed to implementing development plans and projects that will align with the provisions of the broad-based socio-economic empowerment charter of the South African mining industry.

The National Government will obtain tax revenue from the project. The project will provide income for the mining company through profits and will provide wages for employees. Indirect income will also be increased through the mine's procurement of goods and services. More information regarding employment generated by this project will be included in the EIA report.

Although mining is a large contributor to the local economy, the primary objective should be to prevent mining activities from encroaching onto high-potential agricultural land and areas of high biodiversity, and to ensure that the mining area is properly rehabilitated, and the value of the land use are restored. The location of the resource to be mined is a phenomena natural resource that cannot be moved, but the mine infrastructure can be located with due consideration to known environmental and social sensitivities, while still considering engineering feasibility and financial factors.

More details relating to the need and desirability of the proposed project will be contained in the EIA and EMP reports.

## **5.2 Sand as the applied mineral of interest**

Sand mining can be defined as activities associated with extracting sand from the ground. Although sand can be artificially manufactured by crushing coarser aggregates such as stone and gravel mined from a quarry, this analysis focuses on the mining of natural sand from the environment, particularly sand that is found along shallow waters of rivers.

A sand miner would require basic equipment such as a dozer to clear vegetation and build access roads, an excavator or front-end loader to scoop up sand from the deposit, and trucks to carry the sand away. Such an activity can be set up with relatively low cost, and we envisage that barriers to entry are low. The target market for this sand is both local and regional, since this commodity is used for different purpose.

There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage.

## **5.3 Period for which EA is required**

The estimated period for which EA is required, is thirty (30) years. This includes construction, mining and closure, and rehabilitation. A period for post-closure management risks will be investigated during the EIA phase.

## **6 PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED SITE**

All reasonable and feasible alternatives must be identified and assessed during the S&EIA for consideration and assessment during the EIA phase. There are significant constraints that have to be taken into account when identifying alternatives for a project of this scope. Such constraints include social, financial and environmental constraints, which will be discussed in the evaluation of the alternatives. The preferred option must be highlighted and presented to the authorities. Alternatives can typically be identified according to location, process, technology and activity (including the no-go option).

For any alternative to be considered feasible (from a technical and environmental perspective), it must meet the need of the development proposal without presenting significantly high associated impacts. Such alternatives must be described, and the advantages and disadvantages must be indicated. Incremental alternatives typically arise during the EIA process and are usually suggested as a means of addressing identified impacts. These alternatives are closely linked to the identification of mitigation measures and are not specifically identified as distinct alternatives.

The following sub-sections details the development footprint, properties and activity type alternatives to be considered, which are;

### 6.1 Location alternatives

The applicant has an existing mining permit of 5 Ha, which has a renewal of one year dated (10-07-2021 to 10-07-2022). The area surrounding the mining permit has more sand hence the requirement to lodge a mining right application on the remaining extent of portion 27 of the farm Middelburg Town and Townlands 287 JS.

### 6.2 Land use alternatives

The first alternative is sand mining due to the already existing mining permit operation. There is no alternative land use for the proposed area than to be contained with the natural vegetation as per the current land use on Figure 6 below.

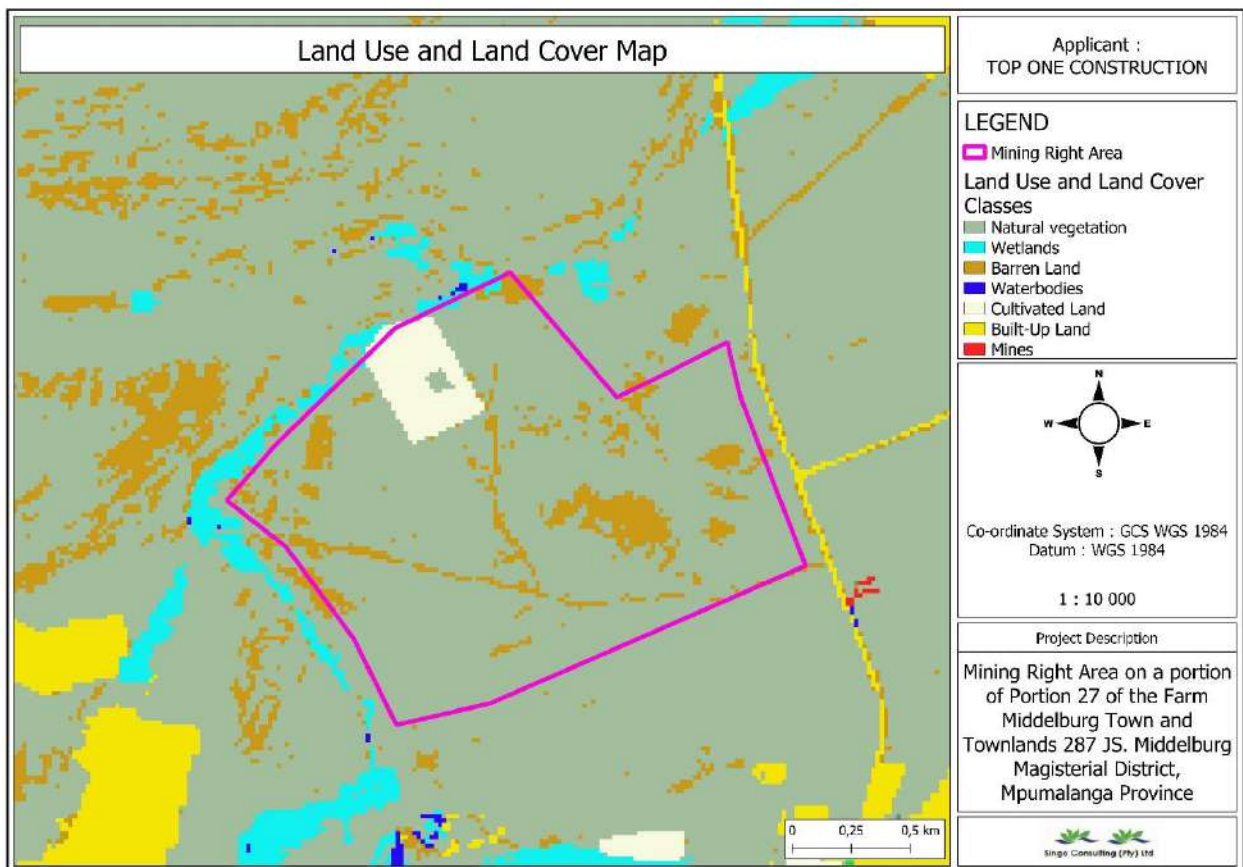


Figure 6: Land use and activity maps around the proposed area

The current land use of the study area is mainly comprised of Cultivated land, Baren land, Wetlands, Natural vegetation and Plantations (See Figure 6). The area is mainly comprised of the Critical Biodiversity Area (CBA), Other natural areas and a portion of the heavily modified area. The CBA does not permit any activities that may compromise the primary biodiversity objective of the area. These areas should be maintained in their natural state with no loss to the ecosystems, functionality or species. The other natural areas contained in the proposed farm area can be described as areas that are not identified as CBAs or ESAs but which provide a range of ecosystem services from their ecological infrastructure. In the heavily modified area, it is where biodiversity and ecological function has been lost to a point that they are not worth considering for conservation at all. From an ecological point of view, the heavily or modified area as well as the other natural areas permits for land use activities that may compromise the biodiversity objective and that those that are only permissible under certain conditions. The proposed land has minor natural vegetation occurring, with water resources on the southern boundary of the project area, the perennial river passes the proposed project area's south-western boundary. This proposed project area falls between the Quaternary Catchments B12E and B12D (Olifants Water Management Area) of which activities of WUL that are triggered have been applied, see Table 6. The land use alternatives must be investigated in more detail once specialist investigations have been completed in the EIA phase.

**Table 7: Site pictures of the current active activities in and around the mining right application area**





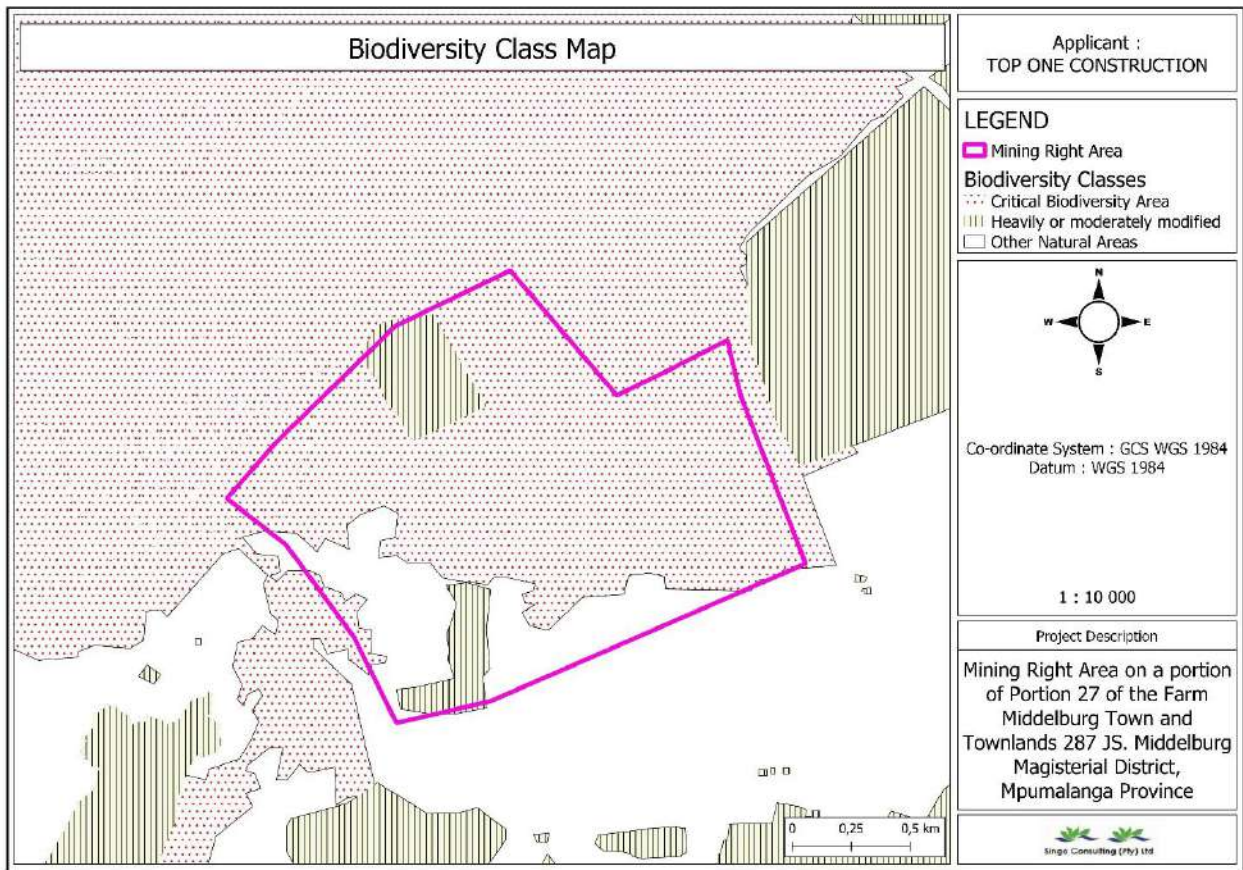


Figure 7: The critical biodiversity map of the area.

## **6.3 Process alternatives**

### **6.3.1 Mine technology**

The alternative for mining and extracting the target mineral resource is sand stripping.

### **6.3.2 Mine operational**

Operations and associated infrastructures will be available for the duration of the LoM.

### **6.3.3 Water supply**

Two alternative water-supply options have been identified, namely:

- Water obtained from drilled boreholes (2 boreholes). This activity will trigger section (21a) of the NWA, which is included in the IWUL application.
- Borehole water will be used for dust suppression, this will trigger Section 21 (g).
- The mining activities and infrastructures is situated within 500m from the watercourses triggering Section 21 (c) and (i).
- Construction of trenches around the mining boundaries triggering Section 21 (c) and (i).

## **6.4 No-go alternative**

The no-go alternative would entail not mining the sand resource and leaving the area as natural land. In accordance with the NEMA, no-go options must be investigated and assessed. No-go options would mean that the proposed mine is not undertaken, thus anticipated negative impacts associated with the environment and social will not take place. This alternative will need to be weighed against the findings of the EIA and the potential socio-economic benefits of the project. The results of the assessment will be presented in the EIA report.

The no-go alternative's viability cannot be addressed at this time and will be discussed in more detail during the EIA phase once specialist inputs have been received. The brief overview of the no-go alternative is not an in-depth assessment, and the impacts will be assessed and discussed in detail in the EIA report.

## 7 PUBLIC PARTICIPATION PROCESS

### 7.1 Objectives of public participation

Public participation aims to:

- Provide I&APs with an opportunity to voice their support, concerns and questions regarding the project, application or decision.
- Provide an opportunity for I&APs, EAPs and the Competent Authority (CA) to obtain clear, accurate and understandable information about the environmental, social and economic impacts of the proposed activity or implications of a decision.
- Provide I&APs with the opportunity to suggest ways to reduce or mitigate an activity's negative impacts and enhance the positive impacts.
- Enable the applicant to incorporate the needs, preferences and values of the I&APs into the application.

### 7.2 Legislation

The PPP must comply with several important sets of legislation that require public participation as part of an application for authorisation or approval, namely the MPRDA, NEMA and NWA. Adherence to the requirements of these acts will allow for an integrated PPP, satisfying the requirement for public participation referenced in the Acts. The details of the integrated PPP are provided in the following sections (7.3-7.7) respectively.

### 7.3 Identification of I&APs

Potential I&APs were identified based on the definition of I&APs in the EIA regulations. The I&APs database includes authorities and landowners. The PPP and consultation have been conducted in adherence to the relevant legislation.

People and/or organisations were registered as I&APs for the project if they:

- Are landowners or tenants adjacent to the proposed study area.
- Are the local municipality/ward councillors with jurisdiction in the area or represent the ratepayers' association.
- Are an authority or organ of state with jurisdiction in respect of any aspect of the activity.
- Responded to the Background Information Document (BID), advertisements and site posters.

- Attended a public meeting.

The PPP commenced on 17<sup>th</sup> of September 2021 with the publishing of the newspaper in the Middelburg observer with an initial notification and call to register as Interested and Affected, ending on the 18<sup>th</sup> of October 2021. The notification procedure included the following;

- Newspaper advertisement
- Site notices plugging
- Stakeholder identification
- Landowner identification through winded search
- Draft Scoping report to be sent to all stakeholders as well as Interested and Affected parties.

#### **7.4 Background information document**

Included in the I&AP notification letters and e-mails with a BID, which includes:

- Locality map and description
- Project description and background
- Legal framework
- Explanation of the scoping and EIA process to be followed
- An invitation to get involved and comment on the proposed project
- Time frames of the scoping report

#### **7.5 Notification of availability of scoping report**

This draft scoping report was made available for public review for a period of 30 calendar days in accordance with Section 40 (3) of the 2014 EIA regulations. The report will be placed for review at the Steve Tshwete local municipality, Gerard Sekoto Library, the Mhluzi public library and soft copies obtainable from Ms Deshney Mapoko ([deshney@singoconsulting.co.za](mailto:deshney@singoconsulting.co.za)) at Singo Consulting. All incoming comments received from stakeholders and I&APs will be included in the Issues and Comments register. Comments being received from stakeholders includes; Department of Agriculture, SANRAL (South African National Roads Agency Limited), Department of Water and Sanitation (DWS) together with community members, other departments are anticipated to comment like; DRDLR (Department of Rural Development and Land Reform), Olifants Catchment, MTPA (Mpumalanga Tourism & Parks Agency), SANBI (South African National Biodiversity Institute) , Eskom, Anglo American, DARDLEA(Mpumalanga Department: Agriculture, Rural Development, Land and Environmental Affairs) ,DEA( Department of Environmental Affairs), DMRE(Department of Mineral and Resources and Ennergy) and Tseve Tshwete Local Municipality and


Scoping report for sand Mining Right application on farm Middelburg Town and Townlands, portion 27

Nkangala District. The DMRE has forty-three days from report submission to review and make decision for the application.

## 7.6 Summary of issues raised by I&APs

Compile the table summarising comments and issues raised, and reaction to those responses.

Table 8: Summary of issues raised by I&APs and stakeholders.

<b>Interested and Affected Parties</b>  List the names of persons consulted in this column, and  Mark with an X where those who must be consulted were in fact consulted.	<b>Date</b>  <b>Comments</b>  <b>Received</b>	<b>Issues raised</b>	<b>EAPs response to issues as mandated by the applicant</b>	<b>Section and paragraph reference in this report where the issues and or response were incorporated.</b>	
<b><u>AFFECTED PARTIES</u></b>					
<b>Landowner/s</b>					
 <b>STEVE TSHWETE LOCAL MUNICIPALITY</b>	<b>X</b>	07/09/2021 (face-to-face)	Submit the draft scoping report so we can comment	Draft scoping report will be submitted in due course.	
<b>Lawful occupier/s of the land</b>					
<b>Landowners or lawful occupiers</b>					

<b>on adjacent properties</b>					
<b>Municipal councillor</b>					
<b>Municipality</b>					
<b>Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA e</b>					
<b>Communities</b>					
<b>Dept. Land Affairs</b>					
<b>Traditional Leaders</b>					
<b>Dept. Environmental Affairs</b>					

<b>Other Competent Authorities affected</b>					
<b><u>Interested &amp; Affected Parties</u></b>					

Due to the limited time frames, all stakeholders and Interested and Affected Parties will be invited and provided an opportunity to comment and raise comments on the Draft Scoping Report for a 30 days calendar period upon receipt of the draft scoping report.



## 8 ENVIRONMENTAL ATTRIBUTES AND DESCRIPTION OF THE BASELINE RECEIVING ENVIRONMENT

### 8.1 Geology of the project area

Rocks of the Dwyka Group in South Africa are among the most important glaciogenic deposits from Gondwana. The Dwyka Group is named for exposures along the Dwyka River east of Laingsburg and forms the basal succession of the Karoo Supergroup. Sutherland (1870) is credited with ascertaining its glacial origin and Dunn (1875) introduced the term "Dwyka Conglomerate" in the second edition of his "Geological Sketch Map of South Africa". Anderson (1901, 1904, 1907) documents various aspects of the Dwyka Group in KwaZulu-Natal (KZN) and felt it was an important marker horizon in the metalliferous deposits that occurred below it, and coal above it.

Dwyka Group lithologies are also well documented by Du Toit (1921) and it was his studies on the Dwyka which led to his thoughts on the wandering of continents, and his documentation of the supercontinent Gondwana (Du Toit, 1937). An excellent review of the state of knowledge of the Dwyka Group in South Africa prior to 1970 is given in Haughton (1969).

Since this time numerous authors have added to our understanding of the Dwyka Group, including aspects of its sedimentology (Stratten, 1968, 1970; Crowell and Frakes, 1975; Von Brunn and Stratten, 1981; Von Brunn and Gravenor, 1983; Von Brunn and Talbot, 1986; Visser, 1986, 1987a,b, 1989, 1991a,b, 1994, 1995, 1996, 1997; Visser, et al., 1987; Von Brunn, 1987, 1996; Isbell et al., 2008), palaeontology (Anderson, 1981; Anderson and McLachlan, 1976) and basinal setting (Stratten, 1970; Visser, 1993; Johnson et al., 1997; Catuneanu, 2004) and it is now widely accepted to be the product of glacio-marine sedimentation, and part of the Late Palaeozoic Ice Age (LPIA) that affected most southern Gondwanan basins (Dineen et al., 2013).

Studies of these rocks have also been used to establish the thermal conditions (Visser and Young, 1990) and to estimate the size and duration of the Gondwanan ice sheets (Veevers and Powell, 1987). Despite a long history of study, many questions concerning Dwyka glaciation still however remain (Isabell et al., 2008).

The age of deposition of the Dwyka Group is discussed by Visser (1990). Subsequently the age has been bracketed by two zircon U-Pb sensitive high-resolution ion microprobe (SHRIMP) dates of  $302 \pm 3$  Ma and  $288 \pm 3$  Ma (Bangert et al., 1999). The onset of Dwyka Group sedimentation is therefore believed to occur during the Late Carboniferous, continuing until the Early Permian.

The Wilge river falls under the coarse grained continental red beds of the Wilge River Formation which underlie most of the Highveld terrain between Middelburg and the Selons River Valley. This succession of up to 2500 m thickness is dominated by immature, coarse-grained, lenticular-bedded, reddish-brown sandstones showing tabular cross-bedding and soft-sediment deformation features.

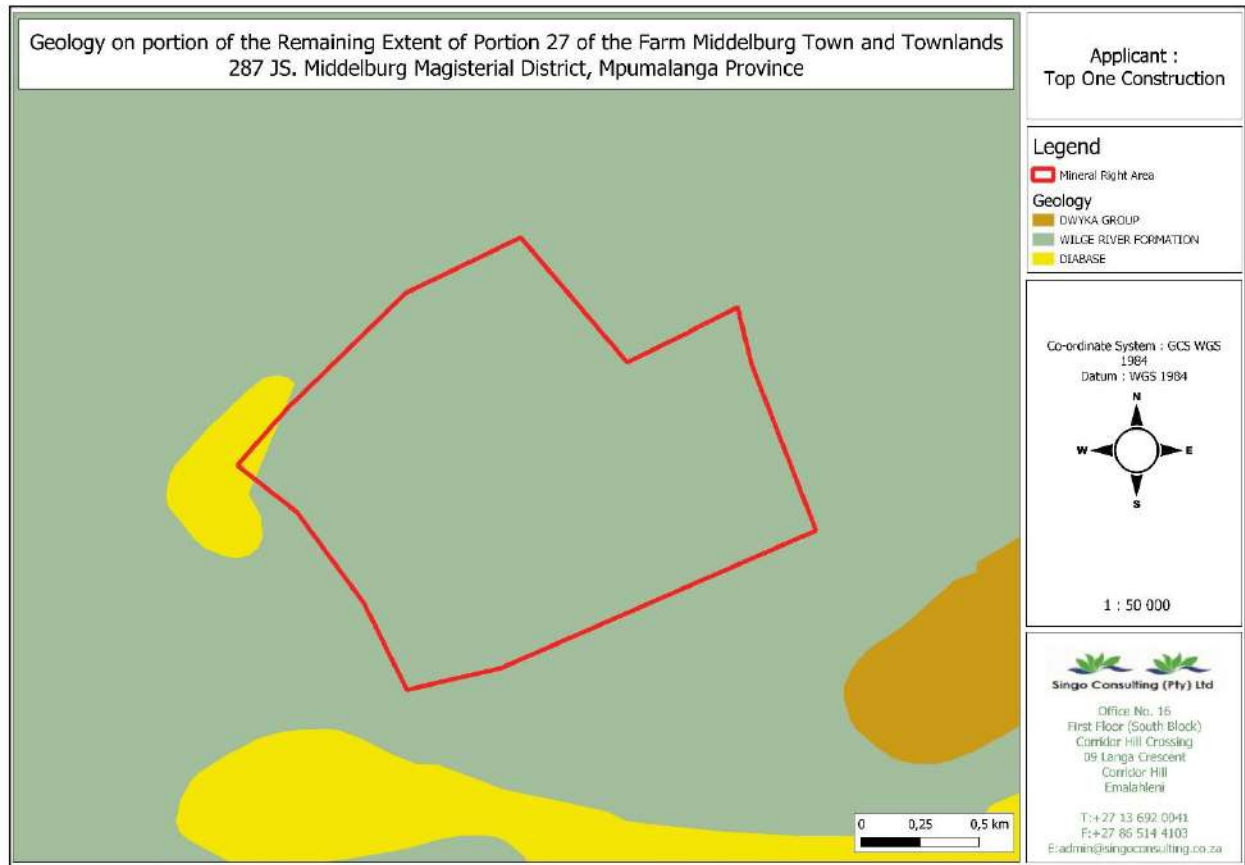


Figure 8: The lithology of the area

### 8.1.1 Soil

A soil specialist has been appointed that will assess the soils, land uses and capability of the land to determine baseline conditions prior to mining. The specialist report will be made available during the EIA phase. Desktop studies currently depicts that the area is comprised of freely drained structureless soil (see Figure 9 below).

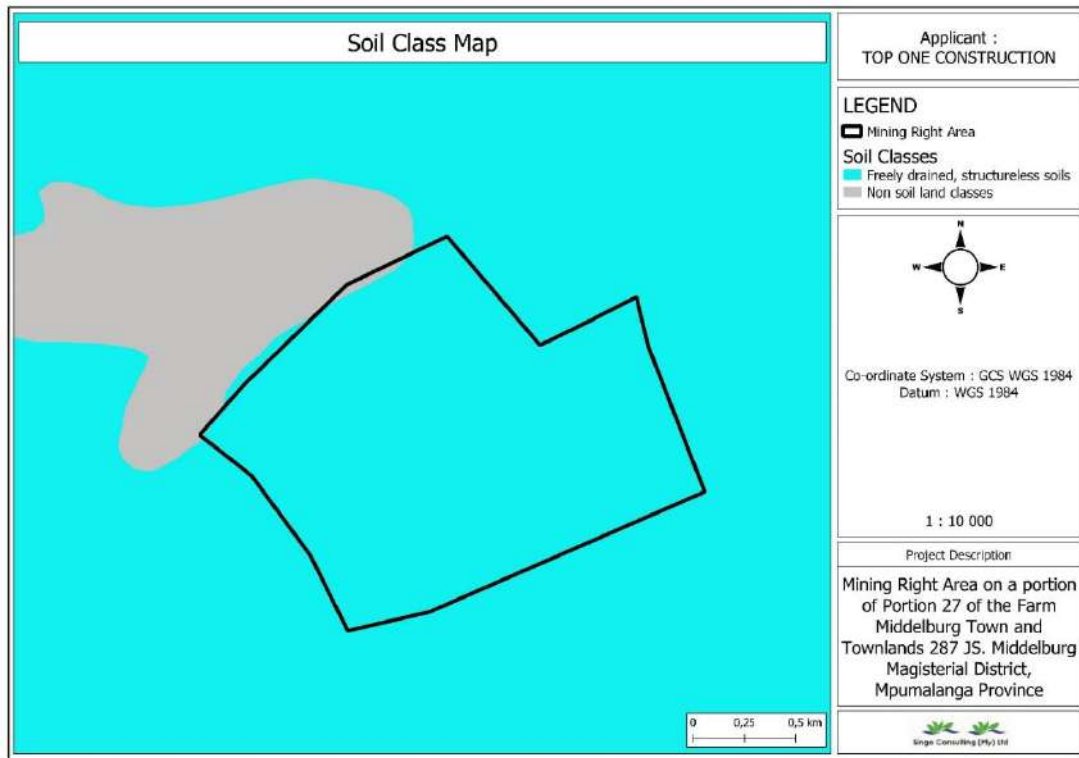


Figure 9: Soil classes map encountered



Figure 10: Soil types observed onsite

## 9 CLIMATE

### 9.1 Temperature

Temperatures in the vicinity of the mine are warm to hot during summer and cold in the winter. Mean Temperatures vary from 29°C in the summer to 15°C in the winter. The region is coldest in June with minimum temperature 2.1°C and maximum temperature reaching 4°C see Figure 11 below.

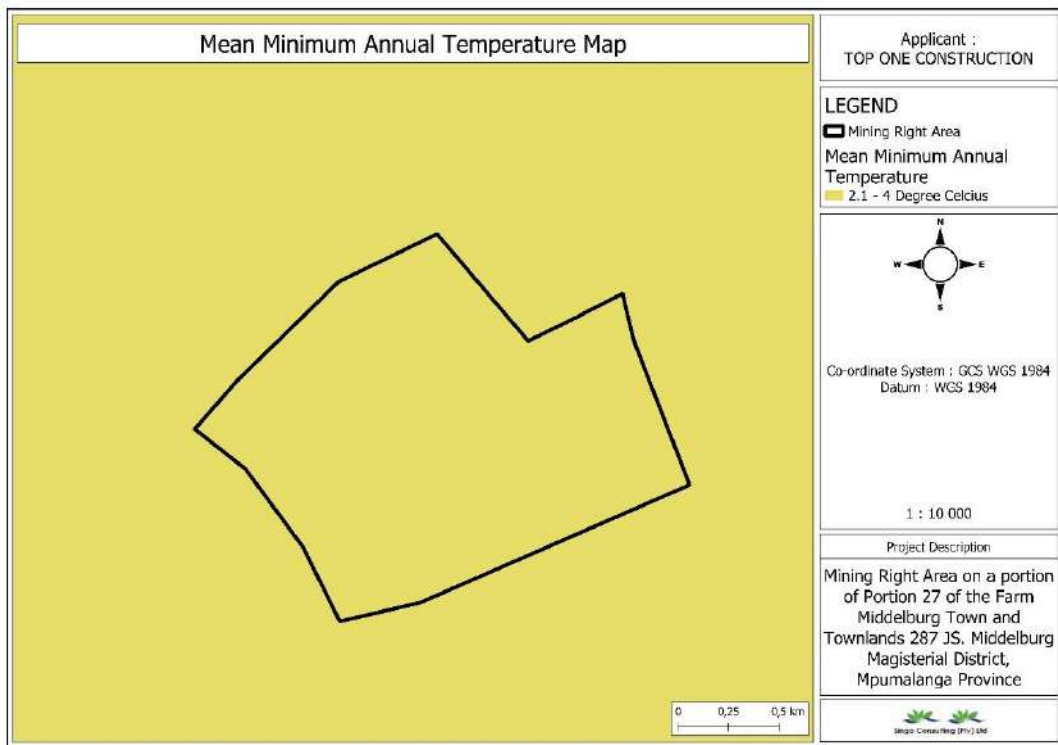


Figure 11: Annual temperature ranges

### 9.2 Rainfall

The daily rainfall extraction utility contains daily patched rainfall data for all official South African Weather Services stations. The rainfall stations considered were close to the site had a reasonable length of record and a relatively complete and reliable data set. The annual rainfall within the mining area ranges from 601mm-800mm as seen on Figure 12 below.

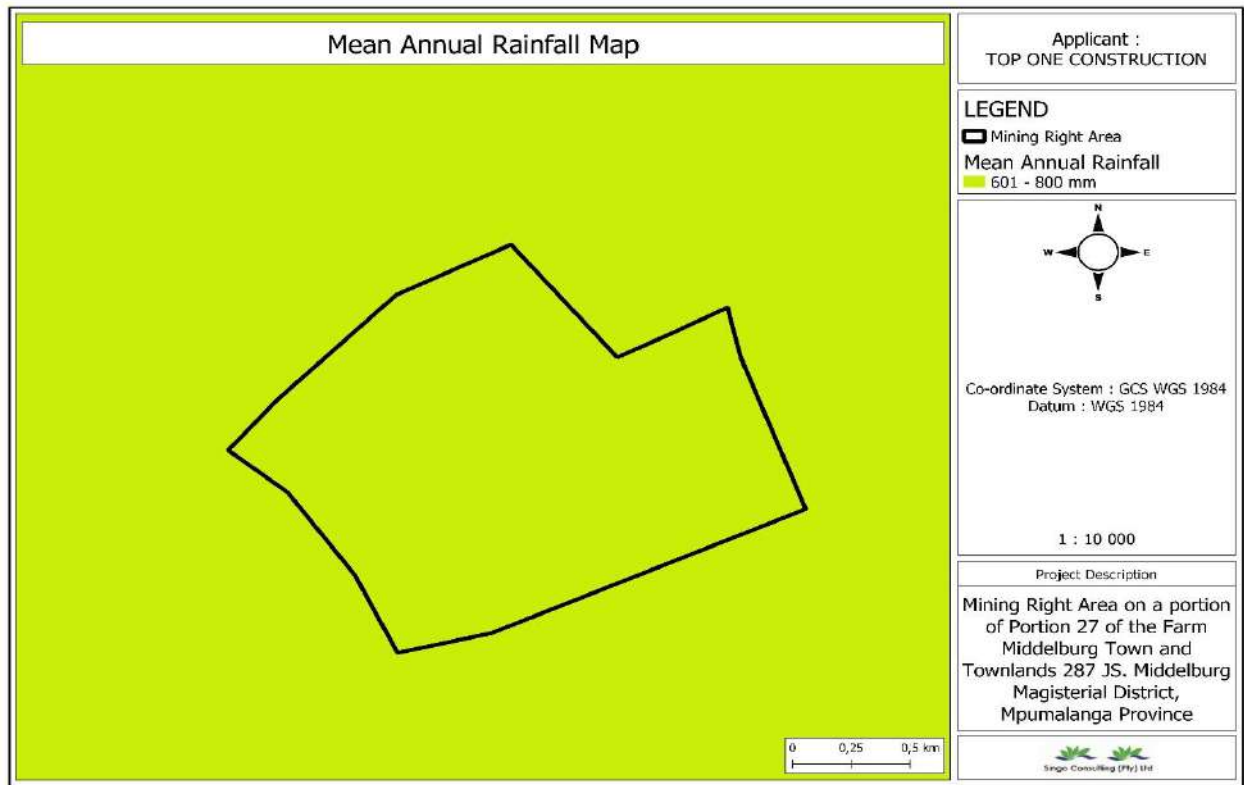


Figure 12: Mean Annual Rainfall map of the project area

## 10 TOPOGRAPHY

The topology of the area is illustrated in Figure 13 below. The topography on site is generally steep with the mountaneous region occurring on the north-eastern part of the project area. The elevation ranges from 1455 m to 1475m above sea level. The contour lines are apart on the southern part of the project area and continue to move closer to each other towards the north-eastern part of the area which indicate the elevation increasing towards the mountain.

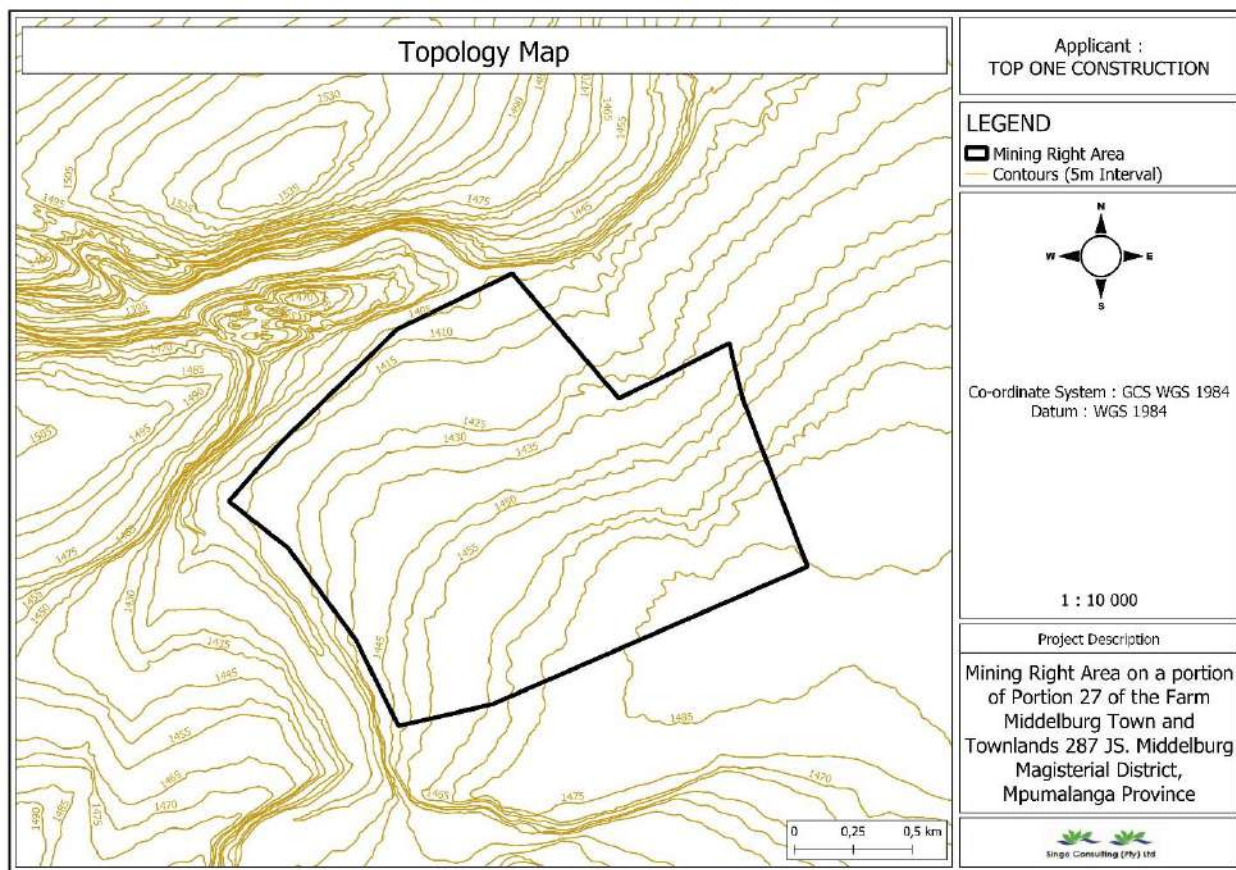


Figure 13: Topology map of the project area

## 11 AIR QUALITY

The assessment of the ambient air quality is based on available ambient air quality information identified in the literature review and data supplied by the DEA and the South African Weather Service (SAWS). Mpumalanga experiences a wide range of natural and anthropogenic sources of air pollution ranging from veld fires to industrial processes, agriculture, mining activities, power generation, paper and pulp processing, vehicle use and domestic use of fossil fuels. Different pollutants are associated with each of the above activities, ranging from volatile organic compounds and heavy metals to dust and odours.

The project area is located near the sand mining permit operations which are also by Top One Construction. There is dust already being produced by the mining operations. The impacts of the proposed mine activities will be investigated during impact assessment by an air quality specialist.

## 12 NOISE

In summary the results of the noise baseline indicated that existing sources of noise in the Project area area:

- Noise of existing mining activities near to the site; and
- Noise from roads (incl. domestic traffic as well as trucks driving through on the N11).

Noise and vibration are not monitored at the proposed site as it is not currently being mined. As with air quality, the surrounding mine impact on noise levels from vehicular and mechanical equipment. In the proposed mining area, the noise will be coming from vehicles moving to and from the site, the existing mining activities and the N11 route.

## 13 WATER RESOURCES

### Surface water

As according to the hydrology map of the proposed mine area (Figure 14), there is a channelled valley bottom wetland that exists within the mine area as well as the floodplain, seep perennial and non-perennial rivers. The proposed mine area falls between the Quaternary catchment B12E and B12D within the Olifants Water Management Area as shown on Figure 15 below. A hydrologist has been appointed to conduct surface water studies and results, of such will be made available during the EIA phase.

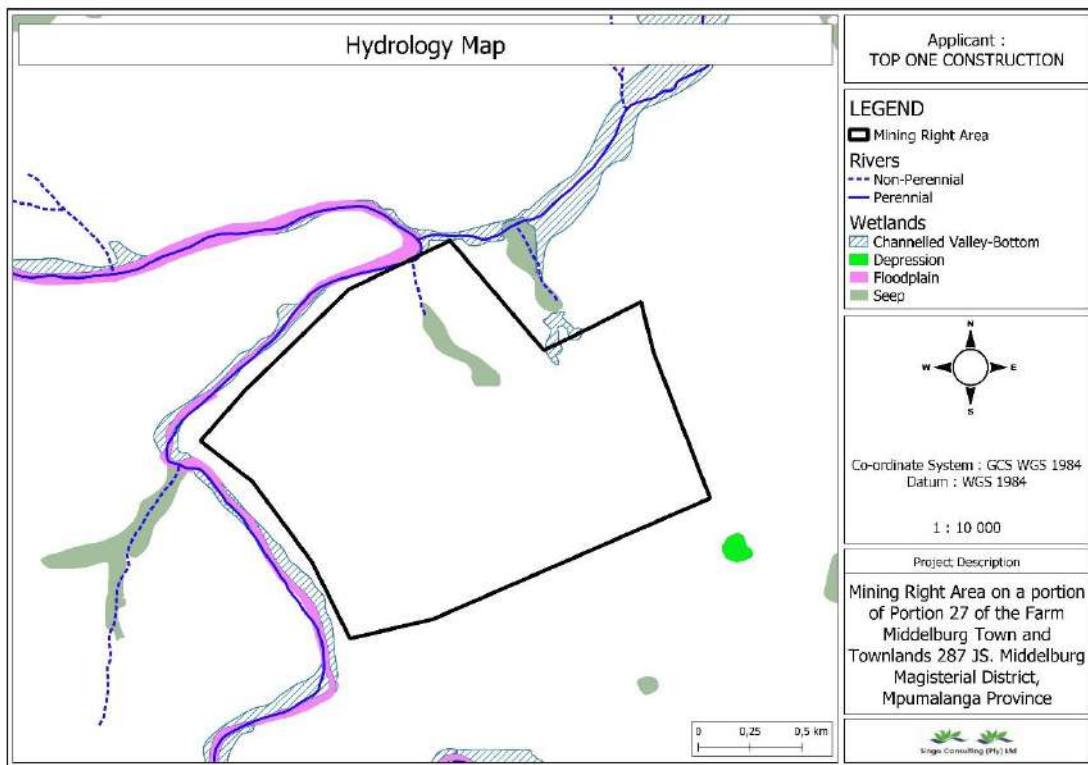


Figure 14: Hydrology map of the area

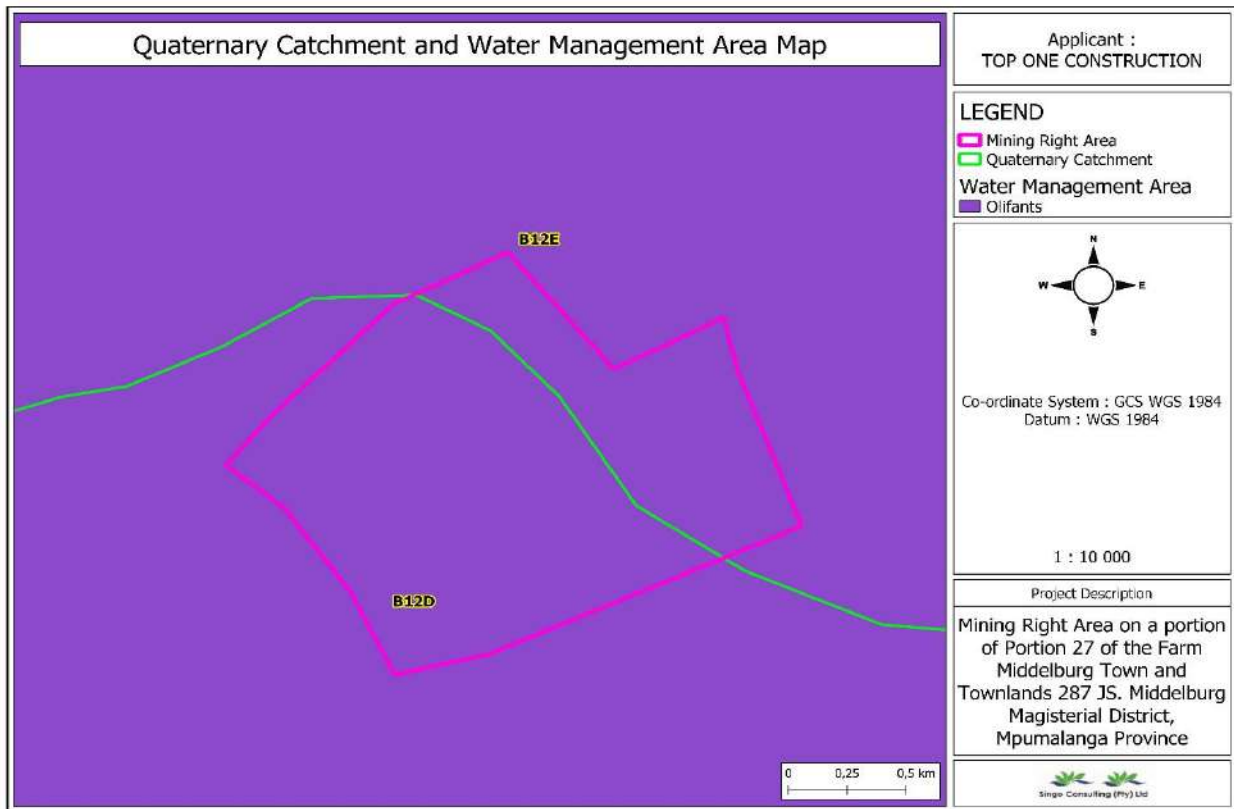


Figure 15: Quaternary Catchment & Water Management Area of the proposed mine area



Figure 16: picture showing the perennial river existing on the north-eastern boundary of the site



## **Ground water**

Since mining activities can potentially impact on the groundwater, a description of the current groundwater conditions is required. A geohydrologist has been appointed to investigate the prevailing groundwater conditions. This will serve as a reference baseline for quantifying potential mining impacts on the existing groundwater regime. The specialist will investigate the impacts of the mining on the groundwater and results of such will be made available during the EIA phase.

## **14 TERRESTRIAL ECOLOGY**

### **14.1 Regional vegetation**

#### **14.1.1 Overview of the biome type**

Singo Consulting (Pty) Ltd will appoint a specialist to conduct a thoroughgoing study for ecology, however as per the desktop study conducted in the premises of Singo consulting in reference to Mucina and Rutherford (2006) it was noted that the project area falls in the Grassland biome. The grassland biome is the second largest biome in South Africa, covering 28.4% of the country or more than 360 000 km<sup>2</sup>. The grassland biome is found in summer rainfall areas, from sea level to above 2,000 m. The grassland biome is rich in plants, with nearly 3,800 plant species recorded. Because fires are frequent, there are very few woody plants like trees (they occur mainly in river courses and on rocky slopes).

In the past, grasslands housed large herds of animals like the black wildebeest, blesbok and eland. Today, these animals mainly survive in nature reserves and on game farms. Grasslands are rich in birds, many of which eat seeds, e.g. black korhaan, blue crane and helmeted guinea fowl. Nearly half of the original grassland biome has been ploughed to plant maize, sunflowers, sorghum and wheat. Grassland supports livestock farming, including cattle and sheep. Most of Gauteng and the Mpumalanga Highveld, which have been developed for mining, industry and urban development, forms part of the grassland biome.

The grassland biome has extremely high biodiversity, second only to the fynbos biome. Rare plants are often found in the grasslands, especially in the escarpment area. These rare species are often endangered, and mainly comprise endemic geophytes or dicotyledonous herbaceous plants. Very few grasses are rare or endangered. The scenic splendour of the escarpment region attracts many tourists.

### 14.1.2 Broad vegetation classification

This grassland vegetation is distributed in Mpumalanga and Gauteng on plains between Belfast (in the east) and the eastern side of Johannesburg (in the west) and extends to Bethal and Ermelo (in the south) and west of Piet Retief. Altitude averages between 1,520 and 1,780 m, but is as low as 1,300 m.

The climatic conditions of the vegetation unit are strongly seasonal summer rainfall, with very dry winters. The MAP (650-900 mm, averaging 726 mm) is relatively uniform across most of the unit, but increases significantly in the extreme south-east. The coefficient of variation in MAP is 25% across most of the unit but drops to 21% in the east and south-east. Frost occurs about thirteen to forty-two days, but longer at higher elevations.

The vegetation is considered vulnerable with a conservation target of 24%. Only very small fraction is conserved in statutory. Some 44% transformed primarily by cultivation, plantations, mines, urbanisation and dam building. Cultivation may have had a more extensive impact, indicated by land-cover data (Mucina and Rutherford, 2006).



Figure 17: Broad vegetation classification for the site

## 14.2 Terrestrial threatened ecosystem

The South African National Biodiversity Institute (SANBI), in conjunction with the DEA, released a draft report in 2009 entitled *Threatened Ecosystems in South Africa: Descriptions and Maps*, to provide background information on the list of threatened ecosystems (SANBI, 2009). The purpose of this report was to present a detailed description of each of South Africa's ecosystems and to determine their status using a credible and practical set of criteria. The following criteria were used to determine the status of threatened ecosystems:

- Irreversible loss of natural habitat
- Ecosystem degradation and loss of integrity
- Limited extent and imminent threat
- Threatened plant species associations
- Threatened animal species associations
- Priority areas for meeting explicit biodiversity targets as defined in a systematic conservation plan

In terms of Section 52 (1) (a) of the NEM:BA, a new national list of ecosystems that are threatened and in need of protection was gazetted on 9 December 2012 (Government Notice 1002 (Driver et. al., 2004)). The list classified all threatened or protected ecosystems in South Africa in four categories: Critically Endangered (CR), Endangered (EN), Vulnerable (VU), or Protected. The purpose of categorising these ecosystems is to prioritise conservation areas in order to reduce the rates of ecosystem and species extinction, and prevent further degradation and loss of structure, function, and composition of these ecosystems. It is estimated that 9.5% of South African ecosystems are threatened, with CR and EN ecosystems accounting for 2.7%, and VU ecosystems 6.8% of the land area. It is vital that Threatened Terrestrial Ecosystems inform proactive and reactive conservation and planning tools, such as Biodiversity Sector Plans, municipal Strategic Environmental Assessments (SEAs), Environmental Management Frameworks (EMFs), EIAs and other environmental applications (Mucina et al., 2006). According to data sourced from SANBI, the proposed project is situated in a VU ecosystem (Eastern Highveld Grassland).

## 14.3 Methodology and reporting

The information provided in this terrestrial biodiversity report is based on observations made during the field survey and a review of the available reports containing known and predicted biodiversity and information on the study area. Various spatial data sets were analysed and relevant information was extracted for the study area. The various approaches and aspects considered are detailed in the following.

### 14.3.1 General

A desktop survey utilising aerial images and photography was undertaken to assemble background information on the different features and vegetation types in the proposed project footprint. The site was then assessed on the 07<sup>th</sup> September 2021 in order to record the true floristic reflection of the study area.

### 14.3.2 Fauna

Most mammals and reptiles are either very secretive, nocturnal, hibernate (reptiles), migrate (birds) or prefer specific habitats, which made sampling and identification difficult. Part of the proposed mine area is utilised for livestock farming as shown in Figure 18 below, no domestic animals were observed on site , however, this conclusion of livestock farming was undertaken based on the findings on site on the day of the assessment where cow dung was observed as well as the cow bones as shown in the figure. According to the screening report developed in the Singo Consulting's offices, the mine area has high environmental sensitivity with features including the *Aves-Circus ranivorus* (see Figure 19 below).



Figure 18: Picture depicting cattle dung observed in the project area



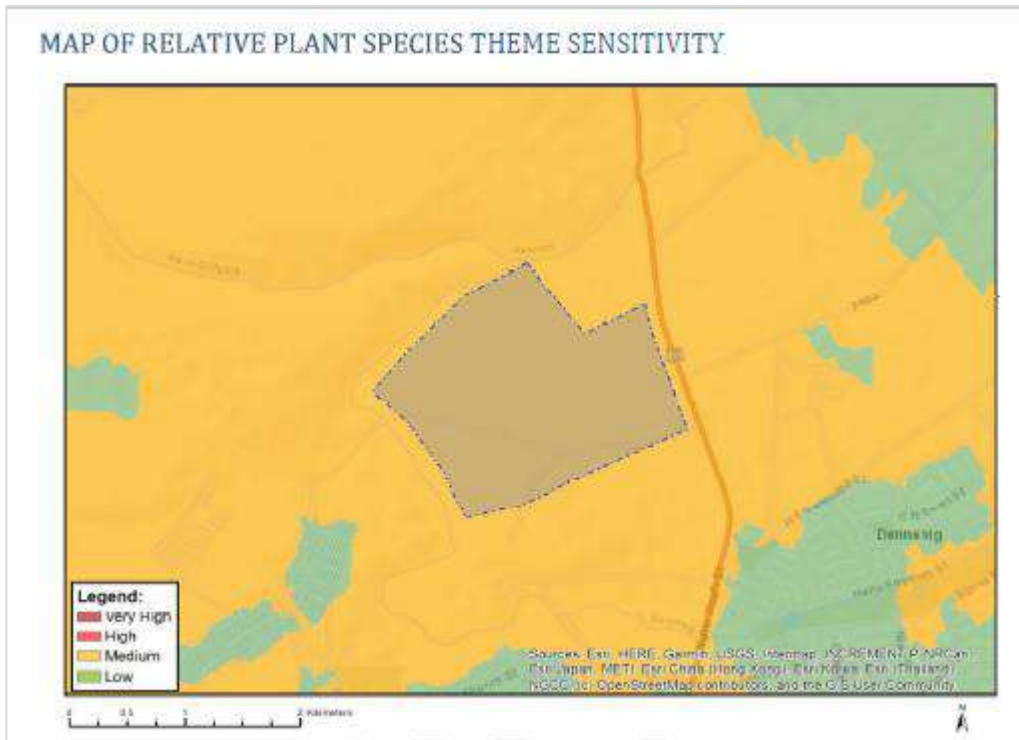


Figure 20: Map of relative plant species theme sensitivity

source: screening report.

#### 14.3.4 Sensitivity map

Following the site visit, an ecological sensitivity map of the site was generated by integrating the information collected on-site with the available biodiversity information available in the aforementioned literature and various spatial databases. The ecological sensitivity of the different units identified in the mapping procedure was rated according to the following scale:

- **Low.** Units with a low sensitivity is likely to have a negligible impact on ecological processes and terrestrial biodiversity. This category is reserved for areas where the natural vegetation has already been transformed, usually for intensive agricultural purposes like cropping. Most types of development can proceed in these areas with little ecological impact.
- **Medium.** Includes areas of natural or previously transformed land where the impacts are likely to be largely local and the risk of secondary impact (like erosion) is low. Development in these areas can proceed with relatively little ecological impact if appropriate mitigation measures are taken.
- **High.** Includes areas of natural or transformed land where a high impact is anticipated due to the high biodiversity value, sensitivity or important ecological role of the area. Development in these areas is highly undesirable and should only proceed with caution as it may not be possible to mitigate all impacts appropriately.

- **Very high.** Includes critical and unique habitats that house rare/endangered species or perform critical ecological roles. These areas are no-go areas from a developmental perspective and should be avoided at all costs.

The project area has very high environmental sensitivity, as according to the screening report generated. With features including Critical Biodiversity Area 2, Focus Areas for land-based protected areas expansion and vulnerable ecosystem. See Figure 21 below.

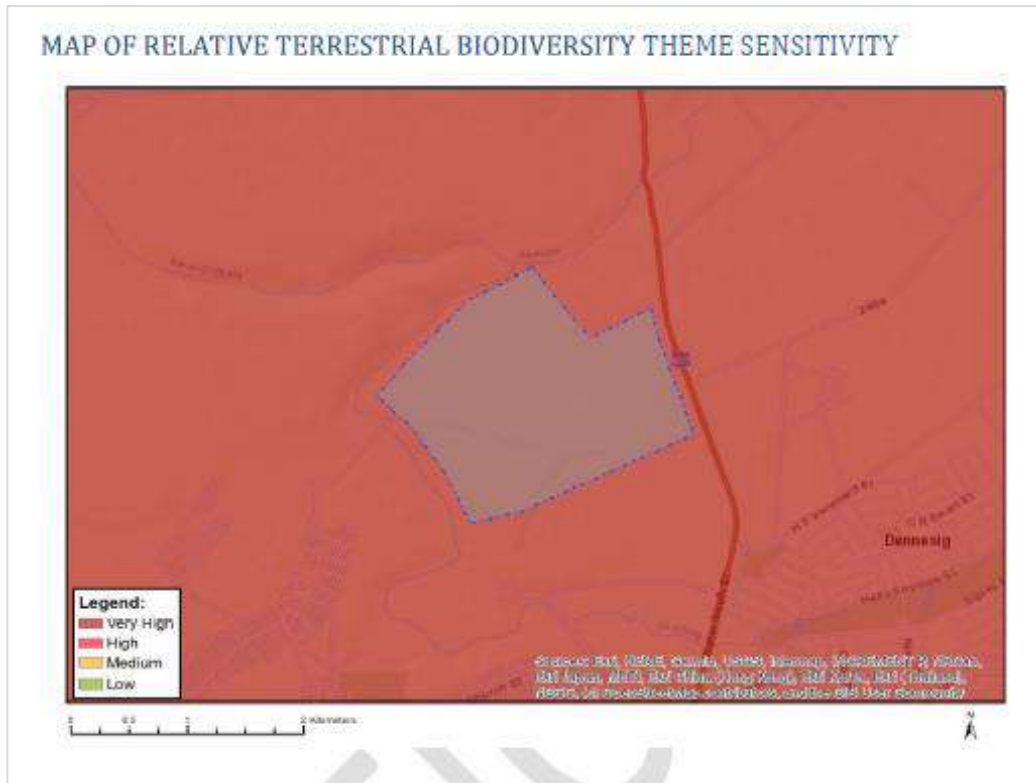


Figure 21: Map of relative terrestrial biodiversity sensitivity (screening report)

## 14.4 Impact assessment methodology

The significance of the impacts will be assessed using the following impact assessment guideline:

**Table 9: Impact assessment**

Nature of the impact		
Positive	+	Impact will be beneficial to the environment (a benefit).
Negative	-	Impact will not be beneficial to the environment (a cost).
Neutral	0	Where a negative impact is offset by a positive impact, or mitigation measures, to have no overall effect.
Magnitude		
Minor	2	Negligible effects on biophysical or social functions / processes. Includes areas / environmental aspects which have already been altered significantly and have little to no conservation importance (negligible sensitivity*).
Low	4	Minimal effects on biophysical or social functions/processes. Includes areas/ environmental aspects which have been largely modified, and/or have a low conservation importance (low sensitivity*).
Moderate	6	Notable effects on biophysical or social functions/processes. Includes areas/ environmental aspects which have already been moderately modified and have a medium conservation importance (medium sensitivity*).
High	8	Considerable effects on biophysical or social functions/processes. Includes areas / environmental aspects which have been slightly modified and have a high conservation importance (high sensitivity*).
Very high	10	Severe effects on biophysical or social functions/processes. Includes areas/ environmental aspects which have not previously been impacted upon and are pristine, thus of very high conservation importance (very high sensitivity*).
Extent		
Site only	1	Effect limited to the site and its immediate surroundings.
Local	2	Effect limited to within 3-5 km of the site.
Regional	3	Activity will have an impact on a regional scale.
National	4	Activity will have an impact on a national scale.
International	5	Activity will have an impact on an international scale.
Duration		
Immediate	1	Effect occurs periodically throughout the life of the activity.
Short term	2	Effect lasts for a period 0 to 5 years.
Medium term	3	Effect continues for a period between 5 and 15 years.
Long term	4	Effect will cease after the operational life of the activity either because of natural process or by human intervention.



<b>Permanent</b>	5	Where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient.
<b>Probability of occurrence</b>		
<b>Improbable</b>	1	Less than 30% chance of occurrence.
<b>Low</b>	2	Between 30 and 50% chance of occurrence.
<b>Medium</b>	3	Between 50 and 70% chance of occurrence.
<b>High</b>	4	Greater than 70% chance of occurrence.
<b>Definite</b>	5	Will occur, or where applicable has occurred, regardless or in spite of any mitigation measures.

Once the impact criteria have been ranked for each impact, the significance of the impacts will be calculated using the following formula:

<b>Significance Points (SP) = (Magnitude + Duration + Extent) x Probability</b>
---

The significance of the ecological impact is calculated by multiplying the severity rating with the probability rating. The maximum value that can be reached through this impact evaluation process is 100 SP (points). The significance for each impact is rated as High (SP≥60), Medium (SP=31-60) and Low (SP<30) significance (see Table 10).

**Table 10: Definition of significance rating**

<b>Significance of predicted NEGATIVE impacts</b>		
Low	0-30	Where the impact will have a relatively small effect on the environment and will require minimum or no mitigation and as such have a limited influence on the decision.
Medium	31-60	Where the impact can have an influence on the environment and should be mitigated and as such could have an influence on the decision unless it is mitigated.
High	61-100	Where the impact will definitely have an influence on the environment and must be mitigated, where possible. This impact will influence the decision regardless of any possible mitigation.
<b>Significance of predicted POSITIVE impacts</b>		
Low	0-30	Where the impact will have a relatively small positive effect on the environment.
Medium	31-60	Where the positive impact will counteract an existing negative impact and result in an overall neutral effect on the environment.
High	61-100	Where the positive impact will improve the environment relative to baseline conditions.

## 14.5 Assessment results

### 14.5.1 Habitant Found on Site

A large percentage of the project area is still in its natural state. Though other parts of the area are used for cultivation and farming. A perennial river is observed on the boundary of the mine area.



Figure 22: Habitant Found on Site

### 14.5.2 Description of the CBAs

According to the biodiversity map of the project area, the proposed mine falls within the CBA, other natural areas and the heavily or moderately modified area. See Figure 23 below.

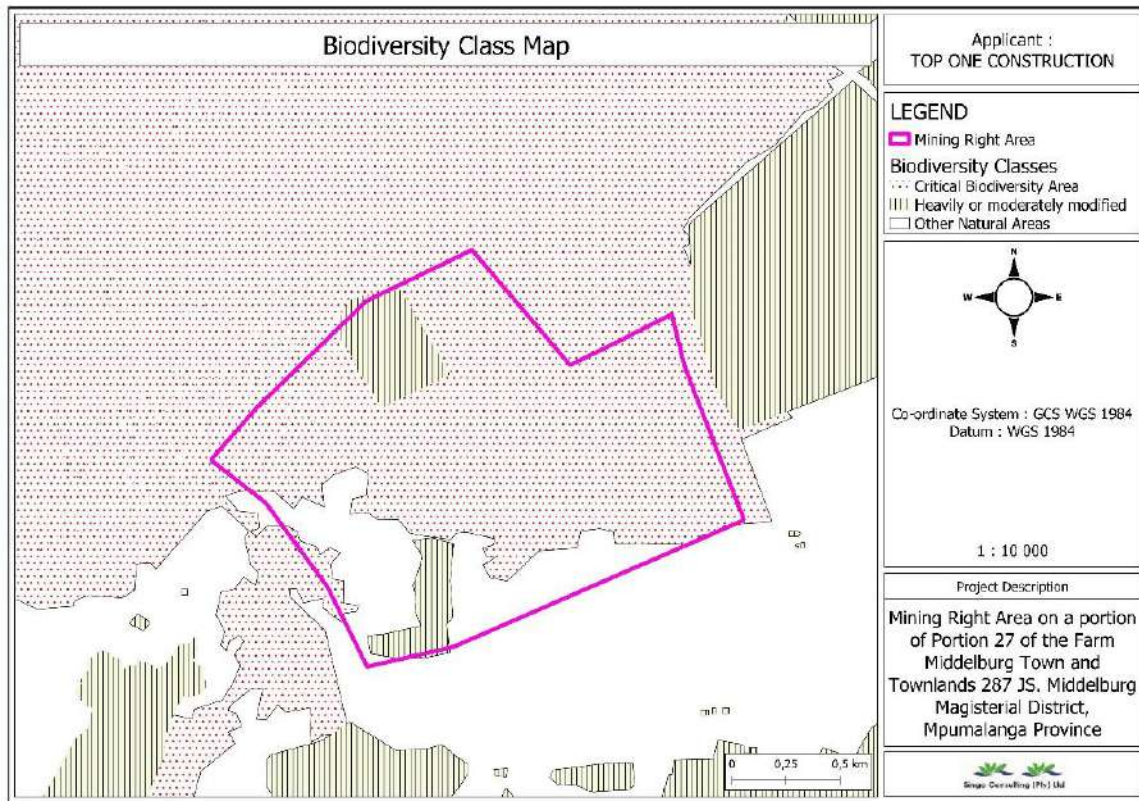


Figure 23: Sensitivity map

## 15 SOILS, LAND USE AND LAND CAPABILITY

The project falls under the Freely drained, structureless soils stated on the soil classification map. The dominating land use on site includes the natural vegetation, cultivated land and baren land as well as wetlands. The land is capable for grazing and arable land as shown in Figure 25 below. A specialist has been appointed that will assess the soils, land uses and capability of the land to determine baseline conditions prior to mining. The specialist report will be made available during the EIA phase.





Figure 24: On-site land uses

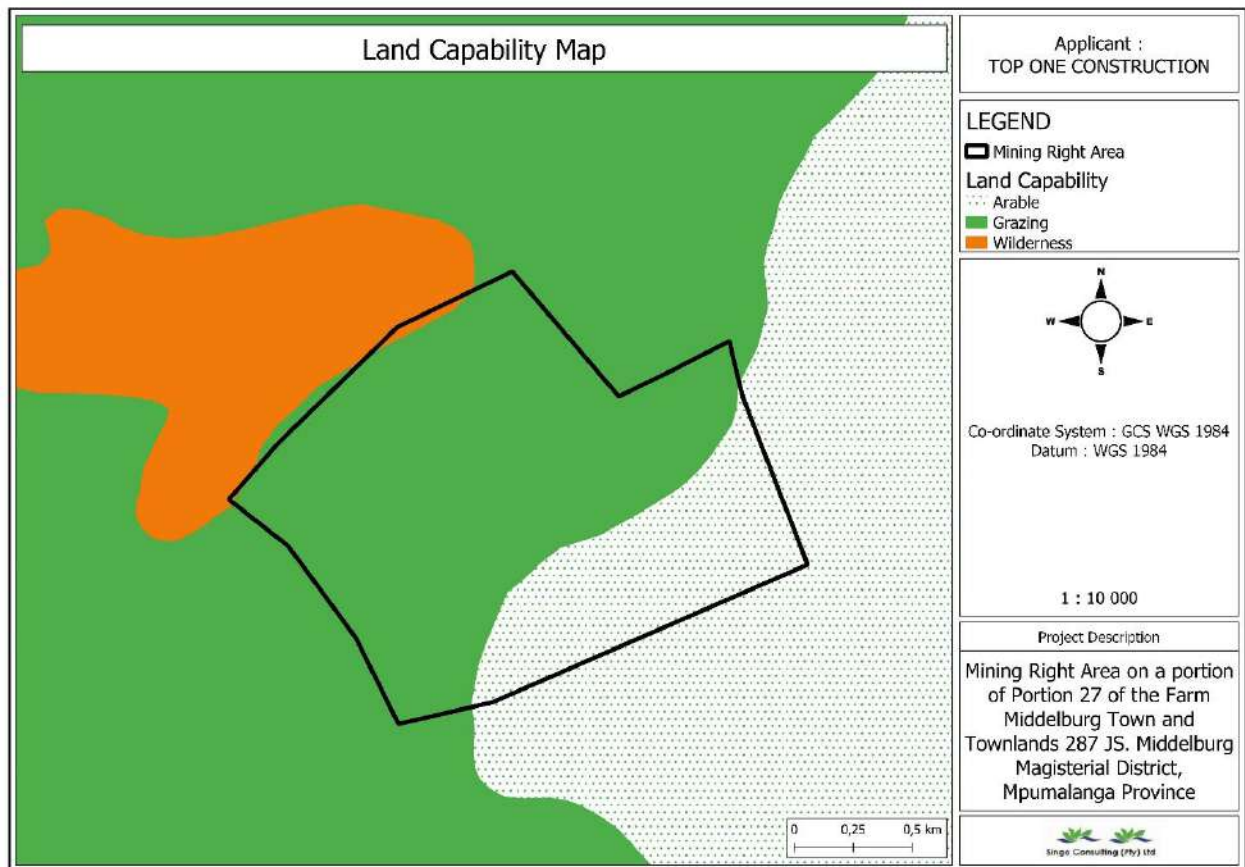
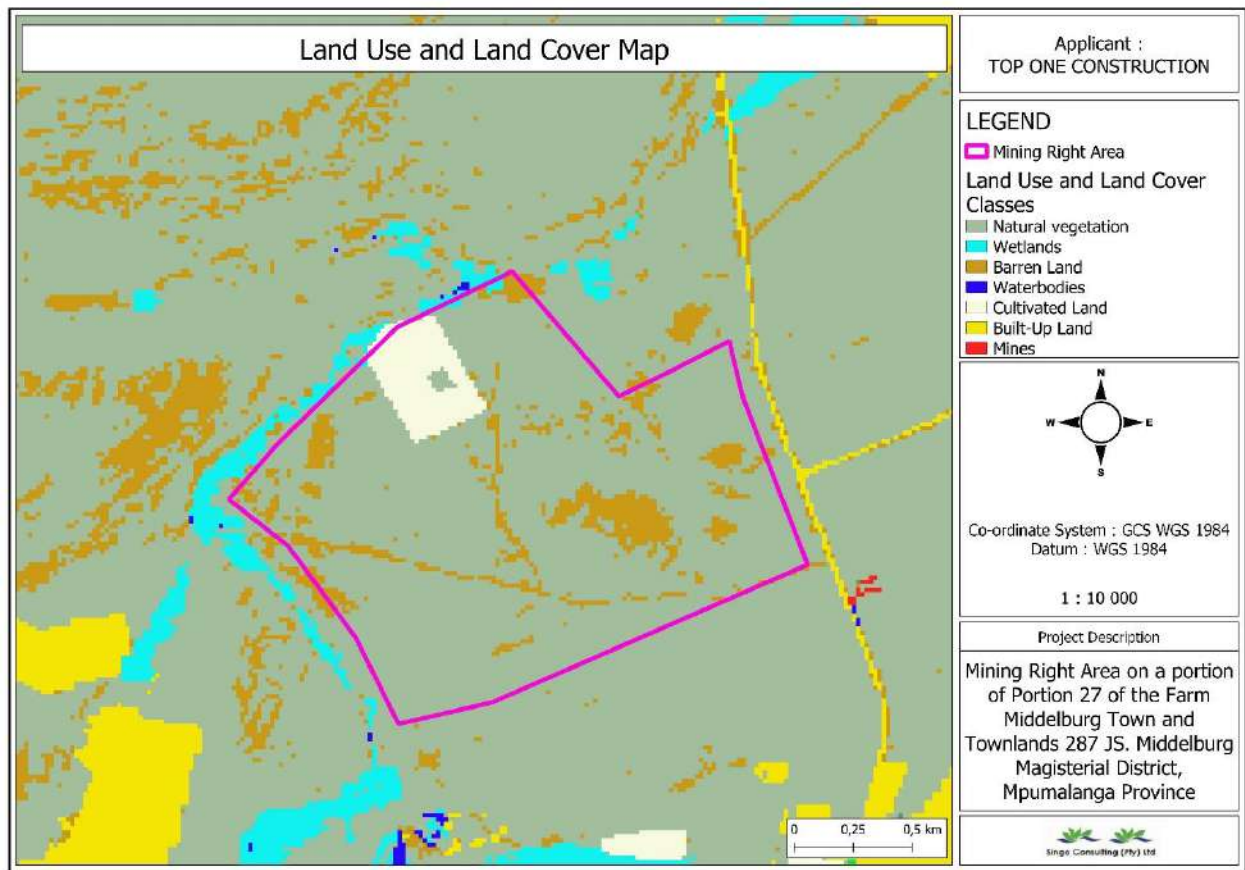


Figure 25: Land use and capability on site

## 16 HERITAGE STUDY

A Phase I Heritage Impact Assessment (HIA) including a Paleontological Desktop Assessment will be done as part of the specialist investigations.

The objectives for the cultural and archaeological study will be:

- To obtain a good understanding of the overall archaeological and cultural heritage conditions of the area through a brief desktop study;
- To locate, identify, record, photograph and describe sites of archaeological and cultural importance;
- Should any sites be identified to propose a study method forward;
- Ensure that all requirements of the local South African Heritage Resources Agency (SAHRA) are met; and
- Report on the results of the archaeological and cultural heritage survey adhering to minimum standards as prescribed by the SAHRA and approved by the Association for Southern African Professional Archaeologist (ASAPA).

The HIA specialist assessment will be available during the EIA phase.

## 17 SOCIO - ECONOMIC ASPECTS

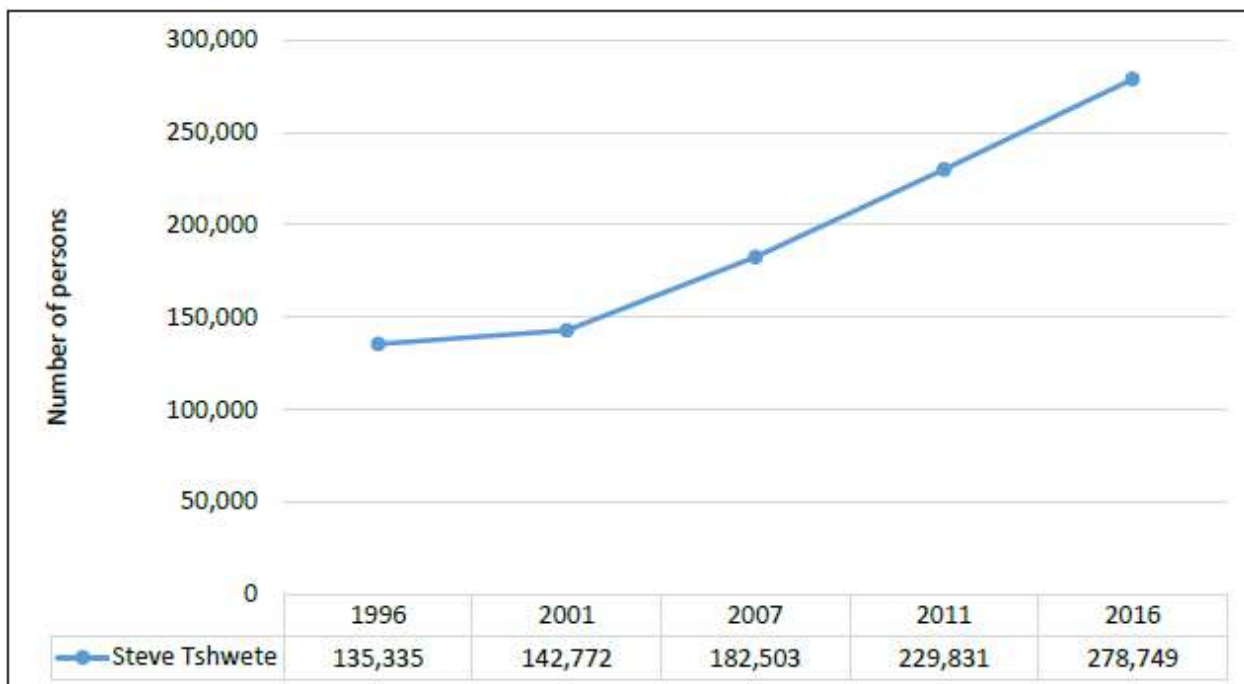
Steve Tshwete economy is one of the biggest economic areas and it is therefore expected that a significant number of employment opportunities are being provided in the area. Mining, trade and manufacturing are the major leading employment drivers in Steve Tshwete LM.

The unemployment rate of Steve Tshwete decreased slightly from 19.7% in 2011 to 16.4% in 2015 and was the lowest among all the municipal areas of Mpumalanga. In 2018, the municipality has recorded a slight increase yet again from 2015 figures to just 17,9%. Unemployment rate for females has increased from 21.8% in 2015 to 23.1% in 2018 and that of males from 12.9% in 2015 to 14.5% in 2018. Though there is a high growth rate of unemployment, Steve Tshwete still has the lowest percentage in the province. Youth unemployment rate according to the 2011 Census figures 27.1% - challenge with especially very high youth unemployment rate of females. The largest employing industries in Steve Tshwete are trade (including

industries such as tourism), community/government services and mining. High labour intensity in industries such as agriculture, trade and construction.

### Population demographics

It is imperative to note that population growth statistics was taken into consideration throughout the IDP planning processes of the municipality. Specific reference is made to the latest 2016 Community Survey in comparison to the Census 1996, 2001, 2007 Community Survey and 2011 Census in order to see the trend.

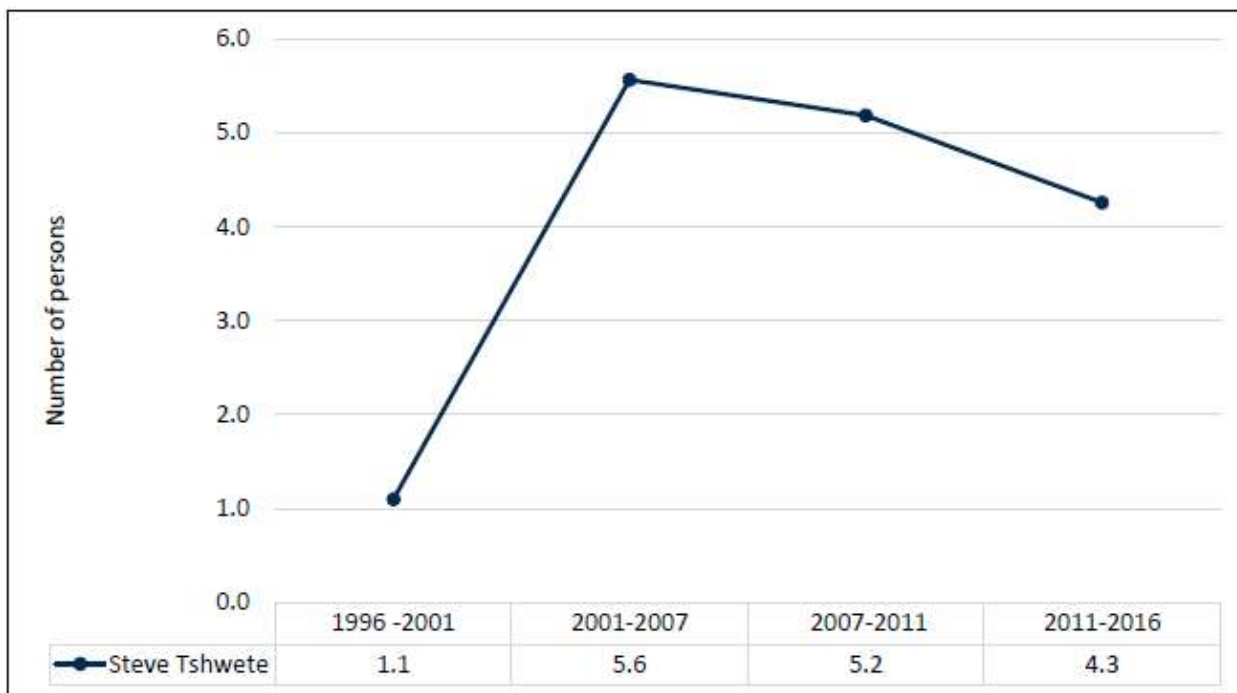


Source: Stats SA Community Profile (1996, 2001, 2007, 2011 & 2016)

Figure 26: Population size for 1996, 2001, 2007, 2011 and 2016

### Population growth rate

The population size and population growth indicate that Steve Tshwete is increasingly under pressure due to population growth. In 2016, the total population in Steve Tshwete was 278 749. Population grew by 4.4 %. Over the nine years period from 2007 to 2016, STLM’s population increased by 9.7%. In 2016, the municipality ranked the 7th largest population in the province and 19.3% of total population of Nkangala as per the 2016 community survey. This could be attributed to the number of industries that were opened within the 10 years (2001-2011) that attracted workers into Middelburg. It is estimated that the population number for 2030 will be at more or less 509 000 people given the historic population growth per annum which will put pressure on the infrastructure and basic service delivery and eventually also sustainable job creation in the long run.



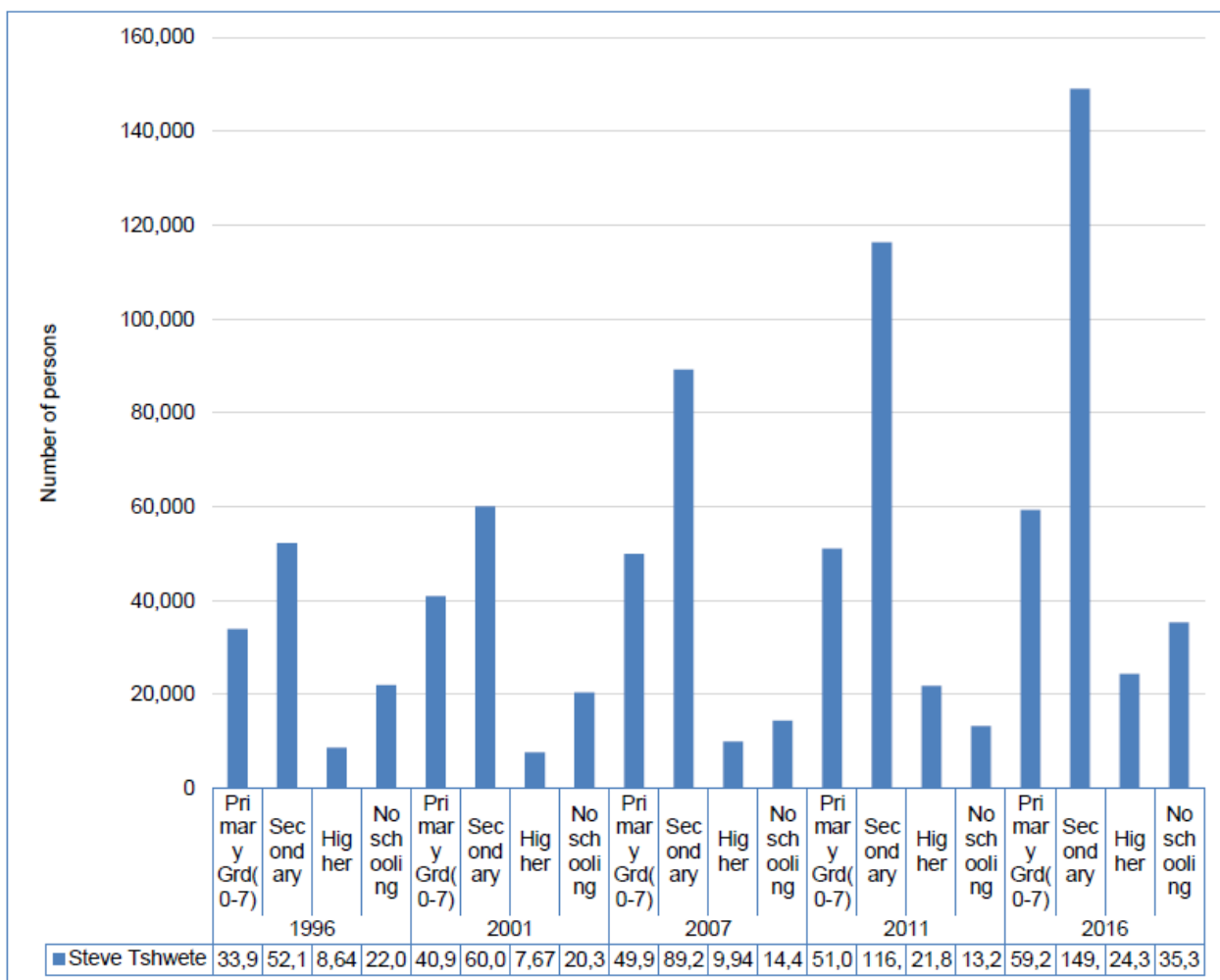
Source: Stats SA Community Profile (1996, 2001, 2007, 2011 & 2016)

Figure 27: Population growth rate for 1996- 2016

### Educational attainment

In terms of education, the majority of the population of the municipality have some form of education with only 14.4. % of the population having no schooling as depicted in the diagram below (Census 2011). According to the 2016 Community Survey, the population in Steve Tshwete aged 20+ completed grade 12, increased from 73 793 in 2011 to 97 943 (increase of 24 150) in 2016 which translate to an increase of 32.7% in the relevant period. Steve Tshwete’s grade 12 pass rate improved from 74.4% in 2011 to 86.3% in 2015 and became the 2nd highest of the municipal areas of the Province. The area achieved an admission rate to university/degree studies of 30.5% in 2015. In 2016, 22.9% grade 12s obtained admission to university/degree studies. Over the years, there has been great improvement of about 4.7% for grade 12 pass rate improved in STLM from 85.6% in 2014 to 89.0% in 2019 – ranked no 1 again in the province. The municipality, department of education and private sector to ensure that the 11% learners who did not qualify for university admission get accommodated in other institutions such as TVET colleges and technikons.





Source: Stats SA Community Profile (1996, 2001, 2011 & 2016)

Figure 28: Highest education attainment (20+ years)

## 18 IMPACT ASSESSMENT

### 18.1 Methodology

Direct, indirect and cumulative impacts of the issues that will be identified during the specialist investigations will be assessed in terms of standard rating scales to determine their significance. The rating system used for assessing impacts (or when specific impacts cannot be identified, the broader term issue should apply) is based on five criteria, namely:

1. Status of impacts– Determines whether the potential impact is positive (positive gain to the environment), negative (negative impact on the environment), or neutral (no perceived cost or benefit to the environment).
2. Spatial scale of impacts– Determines the extent of the impact. Potential impact is expressed numerically on a scale of 1 (site-specific) to 5 (global).

3. Temporal scale of impacts – Determines the extent of the impact in terms of timescale and longevity. Potential impact is expressed numerically on a scale of 1 (project duration) to 5 (permanent).
4. Probability of impacts– Quantifies the impact in terms of the likelihood of the impact occurring on a percentage scale of <5% (improbable) to >95% (definite).
5. Severity of impacts– Quantifies the impact in terms of the magnitude of the effect on the environment (receptor) and is derived by consideration of points 1, 2 and 3 above. For this particular study, a conservative approach is adopted for severity (e.g. where spatial impact was considered to be 2 and temporal impact was considered to be 3, a value of 3 would be adopted as a conservative estimate for severity of impact).

**Table 11: Status of impacts**

Rating	Description	Quantitative rating
Positive	A benefit to the receiving environment (positive impact)	+
Neutral	No determined cost or benefit to the receiving environment	N
Negative	At cost to the receiving environment (negative impact)	-

**Table 12: Spatial scale of impacts**

Rating	Description	Quantitative rating
Very low(VL)	Site-specific: Impacts confined within the project site boundary.	1
Low(L)	Proximal: Impacts extend to within 1 km of the project site boundary.	2
Medium(M)	Logal: Impacts extend beyond to within 5 km of the project site boundary.	3
High(H)	Regional: Impacts extend beyond the site boundary and have a widespread effect, i.e. > 5 km from the project site boundary.	4
Very high(VH)	Global: Impacts extend beyond site boundary and have a national/global effect.	5

**Table 13: Temporal scale of impacts**

Rating	Description	Quantitative rating
Very low(VL)	Project duration: Impacts expected only for the duration of the project or not longer than one year.	1
Low(L)	Short term: Impacts expected on a duration timescale of 1-2 years.	2
Medium(M)	Medium term: Impacts expected on a duration timescale of 2-5 years.	3
High(H)	Long term: Impacts expected on a duration timescale of 5-15 years.	4
Very high(VH)	Permanent: Impacts expected on a duration timescale exceeding 15 years.	5

**Table 14: Probability of impacts**

Rating	Description	Quantitative rating
Highly improbable	Likelihood of the impact arising is estimated to be negligible <5%	1
Improbable	Likelihood of the impact arising is estimated to be negligible 5-35%	2
Possible	Likelihood of the impact arising is estimated to be negligible 35-65%	3
Probable	Likelihood of the impact arising is estimated to be negligible 65-95%	4
Highly probable	Likelihood of the impact arising is estimated to be negligible >95%	5

**Table 15: Severity of impacts**

Rating	Description	Quantitative rating
Very low(VL)	Negligible: Zero or very low impact	1
Low(L)	Site-specific and short-term impacts	2
Medium(M)	Local scale and/or short-term impacts	3
High(H)	Regional and/or long-term impacts	4
Very high(VH)	Global scale and/or permanent environmental change	5

These five criteria combine to describe the overall significance rating. Calculated significance of impact determines the overall impact on (or risk to) a specified receptor and is calculated as the product of the probability (P) of the impact occurring and the severity (S) of the impact if it were to occur (Impact = P×S).

This is a widely accepted methodology for calculating risk and results in an overall impact rating of Low (L), Low/Medium (LM), Medium (M), Medium/High (MH) or High (H). The significance of a particular impact is depicted in Table 18 and assigned a particular colour code in relation to its severity.

**Table 16: Overall significance rating**

Rating	Description		Quantitative rating
Low	PxS=1-3	(low impact significance)	L
Low/medium	PxS=4-5	(low/medium impact significance)	LM
Medium	PxS=6-9	(medium impact significance)	M
Medium/high	PxS=10-12	(medium/high impact significance)	MH
High	PxS=13-25	(high impact significance)	H

**Table 17: Overall significance rating - Severity**

Probability (P)	Severity (S)				
	1	2	3	4	5
1	L	L	L	LM	LM
2	L	LM	M	M	MH
3	L	M	M	MH	H
4	LM	M	MH	H	H
5	LM	MH	H	H	H

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings described in the following.

- **Insignificant:** The potential impact is negligible and will not have an influence on the decision regarding the proposed development.
- **Low:** The potential impact is very small and should not have any meaningful influence on the decision regarding the proposed development.
- **Low/medium:** The potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** The potential impact should influence the decision regarding the proposed activity/development.

- **Medium/high:** The potential impact will affect the decision regarding the proposed activity/development.
- **High:** The proposed activity should only be approved under special circumstances.

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

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

The model outcome is then assessed in terms of impact certainty and consideration of available information. Where a particular variable rationally requires weighting or an additional variable requires consideration, the model outcome is adjusted accordingly.

## 19 IDENTIFICATION OF IMPACTS

Potential impacts resulting from the proposed sand Mine are identified during the scoping phase using input from the following sectors:

- Views of I&APs parties
- Existing information based on literature reviews and desktop studies (EAP, Stakeholders and specialist inputs)
- Site visit with the project team
- Legislation
- Guidelines

The following potential impacts were identified:

- Disturbance of geology and soils
- Land uses and capability
- Socio-economic
- Flora and fauna
- Noise
- Traffic
- Watercourses (wetlands)
- Dust and air quality
- Heritage and cultural resource
- Paleontologic

Proposed specialist studies to assess the environmental impacts during the EIA phase:

Specialist studies:	
Soil and land capability assessment	Traffic Management Study
Geohydrology study	Heritage Impact Assessment
Biodiversity study	Surface water assessment and Floodline determination
Rehabilitation Plan	Integrated Water and Waste Management Plan
Wetland delineation and impact assessment (PES and EIS)	Surface and Storm Water Management Report
Geohydrological investigation, impact assessment and modelling	

### 19.1 Positive and negative impacts of the proposed activities/development and alternatives

Currently, a comprehensive impact assessment cannot be conducted for the anticipated impacts; however, the anticipated impacts can be discussed, and an indication provided whether it will be positive or negative (Table 18).

Table 18: Anticipated impacts

Impact	Status of impacts prior to mitigation	Proposed mitigation/improvement measures/ Recommendations
Surface and groundwater		
Ground and surface water contamination	Negative	<ul style="list-style-type: none"> <li>❖ Conduct water monitoring and implement remedial actions as required and effective rehabilitation to as close to pre-processing conditions as practically possible.</li> <li>❖ It is recommended that the monitoring network be extended to all the boundaries; north, south, east, and west of the proposed sand mine. The construction must be overseen by a qualified</li> </ul>

		<p>Hydrogeologist to monitor pollution in the upper weathered aquifer as well as the lower fractured aquifer.</p> <ul style="list-style-type: none"> <li>❖ A monitoring network should be dynamic. This means that the network should be extended over time to accommodate the migration of contaminants through the aquifer as well as the expansion of infrastructure and/or addition of possible pollution sources. An audit on the monitoring network should be conducted annually</li> <li>❖ Prevention of pollution of surface water resources and impacts on other surface water users by training of workers to prevent pollution, equipment and vehicle maintenance, fast and effective clean-up of spills, effective waste management, manage clean and dirty water in accordance</li> <li>❖ The disturbance of streams and surface drainage patterns and reduction in flow to downstream must be mitigated through careful design of ephemeral stream diversion that minimizes impacts on the downstream environment, limit activities and infrastructure within wetland and watercourses and their floodlines and implementation of storm water management plan to divert clean water</li> <li>❖ Clean water trenches should be constructed surrounding the sand mine to prevent clean water from entering the sand mine area, regarded as a dirty water catchment</li> <li>❖ Dirty water trenches must be constructed as well to direct water from the mine to the pollution control dam, thereby preventing any contaminant water from leaving the mine area.</li> </ul>
<p><b>Wetland/River/ Hydrology/Geomorphology</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>• Natural pans and channeled valley bottom wetlands, including the Klein Olifants River, are the most important wetlands in the study area. These wetlands have been identified as potential no - go areas and it is recommended that all mining activities avoid these highly sensitive wetlands. Where any wetlands are to be destroyed, the best possible security factor (to a factor of 2) should be used if mining is above 100 m. This must be determined in the later stages of the design of the project.</li> <li>• Mining across wetlands/streams should be restricted to low flow period (dry winter season) if possible. Ensure that mining activities are carefully monitored to limit unnecessary impacts to wetlands/riparian areas (particularly in-stream habitat).</li> <li>• Do not lower the original stream bed / profile of the wetland/river as this may result in scouring in an upstream direction and further alteration of bed conditions.</li> <li>• Ensure that coarse immovable material including boulders and other rock in river channels is not removed to ensure continued stability and functioning of the river systems. River sediments should not be permanently removed from the system in any case.</li> <li>• Limit activities occurring within the in-stream area of channels.</li> <li>• Under no circumstance should consideration be given to the excavation of an artificial channel or the damming of wetlands or rivers in such a manner as to totally restrict the flow.</li> <li>• Excavated material/sediments/spoil from the mining zone (including any foreign materials) should not be placed or stockpiled within wetlands or river channels, including the riparian zone of streams/streams.</li> <li>• Any abstraction of water from rivers/wetlands for construction purposes must be approved by the Department of Water and Sanitation (DWS) by means of WUL.</li> </ul>

<p><b>Potential reduction of catchment yield of the aquifers through dewatering</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>Regularly monitor groundwater levels as per the recommendations of the geohydrological report.</li> </ul>
<p><b>Terrestrial ecology</b></p>		
<p><b>The clearance for the construction of the proposed structures and infrastructure will result in habitat loss</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>Keep the footprint of the disturbed area to the minimum and designated areas only.</li> <li>Unnecessary vegetation clearing should be avoided.</li> <li>Ensure rehabilitation plans are initiated during and after construction in areas not affected by mining operations.</li> <li>Vegetation clearing on slopes must be minimised and, where necessary, appropriate stormwater management must be put in place to limit erosion of exposed soil.</li> <li>No harvesting of indigenous tree species for firewood should be permitted.</li> <li>An environmental induction for all staff members must be mandatory to discuss the potential of fire e.g. only smoking in designated areas and no open cooking fires.</li> <li>All licences must be obtained prior to mining;</li> <li>All ablution facilities must be placed far away from the water bodies including their buffer zone (50 meters from watercourses);</li> <li>When placing structures as well as the mining area high sensitive areas of this report must be avoided;</li> <li>An alien and invasive management plan as well as emergency preparedness plan during spillages must be adhered to at all times; and</li> <li>Rehabilitation of cleared/mined areas occurs to avoid or to limit erosion</li> </ul>
<p><b>Accidental introduction of alien species and invaders</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>Eradication and/or control of alien invasive plants and weeds as per the alien and invasive species monitoring programme.</li> <li>Disturbance of natural areas should be avoided as far as possible and the spread of alien flora into natural areas must be controlled.</li> <li>Continuous monitoring of the growth and spread of alien and invasive flora coupled with an adaptive management approach to identify suitable control mechanisms (e.g. mechanical, chemical or biological control). Mechanical control is usually preferred.</li> <li>Cleaning of vehicles and equipment before entering natural areas to remove large deposits of foreign soils and plant material sourced from elsewhere.</li> </ul>
<p><b>Faunal mortalities</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>Environmental induction for all staff members must be mandatory to discuss issues related to the killing and/or disturbance of faunal species should be avoided.</li> <li>Several staff members must complete a snake handling course to safely remove snakes from designated areas.</li> <li>Road mortalities should be monitored by vehicle operators (for personal incidents only) and the ECO (all road kill on a periodic monitoring basis as well as specific incidents) with trends being monitored and subject to review as part of the monthly reporting. Monitoring should occur via a logbook system where staff notes the date, time and location of the sighting/incident. This will allow determination of the locations where the greatest likelihood exists of causing road mortality and allow mitigation against it (e.g. fauna underpasses, and seasonal speed reductions). Mitigation must be adapted to the on-site situation which may vary over time.</li> </ul>



		<ul style="list-style-type: none"> <li>• All staff operating motor vehicles must undergo an environmental induction training course that includes instruction on the need to comply with speed limits, to respect all forms of wildlife (especially reptiles and amphibians) and, wherever possible, prevent accidental road kills of fauna. Drivers not complying with speed limits should be subject to penalties.</li> <li>• The proposed prospecting activities will result in the deaths of numerous fauna species. It is suggested that construction and mining operations occur from a predetermined area and move along a gradient to allow fauna species to relocate.</li> <li>• The ECO must monitor live animal observations to detect trends in animal populations and implement proactive adaptable mitigation of vehicle movements.</li> <li>• Should holes or burrows be located on-site, contact a zoological specialist to investigate and possibly remove any species located in them.</li> <li>• Where possible, barriers around excavation sites must be erected to prevent fauna from falling into excavations.</li> <li>• The area surrounding the bulk sampling operation must be demarcated and fenced-off to restrict animals from moving into the area, and to reduce fauna mortalities.</li> </ul>
<b>Vegetation and Fauna Management</b>		<ul style="list-style-type: none"> <li>• Keep the clearing of natural vegetation in wetland areas to a minimum and attempt to ensure that clearing occurs in parallel with the mining progress where practically possible.</li> <li>• Limit mining equipment operating in wetland/riparian areas to that needed to clear</li> <li>• Temporary noise pollution due to mining works should be minimized in sensitive areas by ensuring the proper maintenance of equipment and vehicles and tuning of engines and mufflers as well as employing low noise equipment where possible.</li> <li>• No wild animal may under any circumstance be hunted, snared, captured, injured, killed, harmed in any way or removed from the site. This includes animals perceived to be vermin.</li> <li>• Any fauna that are found within the mining corridor should be moved to the closest point of natural or semi-natural vegetation outside the mining corridor. A specialist may need to be used for dangerous/venomous species such as snakes.</li> </ul>
<b>Geology and soils</b>		
<b>Land use change which will affect the soil and land use capability both during construction phase and post-mining operations. Loss of agricultural soils and land expected.</b>	Negative	<ul style="list-style-type: none"> <li>• Should the No-Go alternative not be considered, mining activities must be located on low-medium agricultural potential land to minimise impacts.</li> <li>• Compensate landowners.</li> <li>• Rehabilitate areas disturbed by mining to return land to arable land where feasible. If not, other land uses (decommissioning phase) deemed socially, economically or environmentally applicable must be considered.</li> </ul>
<b>Site clearance and levelling during the construction phase will cause some additional exposed areas and could trigger erosion and siltation, especially during rainy periods</b>	Negative	<ul style="list-style-type: none"> <li>• Prevent soil loss through erosion.</li> <li>• Develop appropriate storm water management system to control surface run off over exposed areas.</li> <li>• Preserve soil fertility for later use.</li> <li>• Ensure all vehicles stay within the designated areas (for example, away from watercourses).</li> <li>• Plan to construct the majority of development during the dry winter months.</li> <li>• Have in place temporary erosion and sedimentation trapping control measures during the construction phase</li> </ul>

<p><b>Soils and Sediment Management</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>• Where possible, mining activities in river and wetlands should proceed during the dry winter months (low or zero flow periods) in order to limit the potential for erosion linked to high runoff rates.</li> <li>• All soil stockpiles should be placed in an up-slope direction from the trench so that that any surface wash is directed into the trench and not further downslope.</li> <li>• Any erosion points created during mining activity construction should be filled and stabilized immediately. Stockpiles must be protected from erosion, stored on flat areas where possible, and be surrounded by appropriate berms.</li> <li>• No stockpiling of soils or materials should take place within a watercourse, including wetlands and the riparian zone of streams/ivers.</li> <li>• Periodic visual inspections of on-site water quality, identifying the source of any rapid increases in turbidity of surface waters and remedying this where necessary such be performed by a qualified Environmental Officer. Water must be pumped out into a well- vegetated area some distance from any watercourse to facilitate sediment trapping and reduce the chance of sediment entering wetlands/streams.</li> <li>• Excavated and imported material should be stored away from streamlines / areas of concentrated flow to limit the risk of sediment wash to downstream areas.</li> <li>• Any topsoil removed from wetlands must be stockpiled separately from subsoil material and replaced once mining is complete to facilitate re-colonization of the site.</li> <li>• Stripped topsoil from wetlands must not be buried or in any other way be rendered unsuitable for further use by mixing with spoil or subjected to compaction by machinery.</li> <li>• Exposed soils should be rehabilitated as soon as practically possible to limit the risk of erosion. The channel embankments must be rehabilitated to ensure both longitudinal and cross-sectional stability against summer floods.</li> </ul>
<p><b>Pollution</b></p>		
<p><b>Waste Management/Pollution Control</b></p>	<p>Negative</p>	<ul style="list-style-type: none"> <li>• Storage of potentially hazardous materials (e.g. fuel, oil, etc.) should be outside of the 100-year flood line, or within a horizontal distance of 50m from a watercourse or wetland. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas.</li> <li>• Operation and storage of machinery and mining-related equipment must be done outside of wetlands and rivers wherever possible, unless authorised by a WUL.</li> <li>• Spillages of fuels, oils and other potentially harmful chemicals should be cleaned up immediately and contaminants properly drained and disposed of using proper solid/hazardous waste facilities (not to be disposed of within the natural environment). Any contaminated soil from the site must be removed and rehabilitated timeously and appropriately.</li> <li>• Mechanical plant and bowsers must not be refuelled or serviced within or directly adjacent to any watercourse (including river and wetlands).</li> <li>• Provide adequate waste disposal facilities (bins) and encourage workers not to litter or dispose of solid</li> </ul>

		<p>waste in the natural environment but to use available facilities for waste disposal.</p> <ul style="list-style-type: none"> <li>• Ensure that any rubbish is regularly cleared from the site, especially from wetlands/streams.</li> <li>• Routinely check machinery/plant for oil or fuel leaks each day before mining activities begin. No stockpiling should take place within a watercourse, including wetlands and the riparian area of the river.</li> <li>• Sanitation – portable toilets (1 toilet per 30 users is the norm) to be provided where mining is occurring. Workers need to be encouraged to use these facilities and not the natural environment. Toilets should be located outside of the 1:100 yr. flood line of a watercourse or 50m or from any natural water bodies including streams and wetlands. Waste from chemical toilets should be disposed of regularly and in a responsible manner by a registered waste contractor.</li> </ul>
<b>Social</b>		
<b>Recruitment strategies for the mine</b>	Positive	N/A
<b>Advantage to previously disadvantage individuals</b>	Positive	N/A
<b>Community development programmes</b>	Positive	N/A
<b>Upgrades and expansion of services will benefit local area</b>	Positive	N/A
<b>Increased income generation for local community</b>	Positive	N/A
<b>Increased job opportunities for local mining communities</b>	Positive	N/A
<b>Economic injection to the area and Mpumalanga</b>	Positive	N/A
<b>Noise</b>		
<b>Noise emanating from heavy machinery and transport vehicles</b>	Negative	<ul style="list-style-type: none"> <li>• Noise barriers in the form of berms should be constructed as close to the noise sources as possible.</li> <li>• Mining-related machines and vehicles must be serviced regularly to ensure noise suppression mechanisms are effective, e.g. installing exhaust mufflers where possible.</li> <li>• Noisy machinery must be used predominately during daylight hours.</li> <li>• Grievance mechanism to record complaints should be kept on site and investigated.</li> <li>• Regular monitoring of noise to take place.</li> </ul>
<b>Infrastructure (e.g. contractor’s yard, weighbridge, workshop and stores)</b>	Negative	<ul style="list-style-type: none"> <li>• To reduce the visual impact of permanent structures, colours for roofing, walls, etc. should have a matt finish to reduce reflection.</li> <li>• Infrastructure must be located away from sensitive and elevated areas.</li> </ul>

Lighting pollution	Negative	<ul style="list-style-type: none"> <li>• Avoid up-lighting of structures but rather direct the light downwards and focused on the object to be illuminated.</li> <li>• Use non-UV lights where possible, as light emitted at one wavelength has a low level of attraction to insects. This will reduce the likelihood of attracting insects and their predators specifically in the site camps.</li> </ul>
<b>Heritage and cultural</b>		
Heritage resources disturbed/destroyed	Negative	<p>1. From a heritage perspective supported by the findings of this study, the proposed mining development and associated developments are feasible. However, the proposed mining development should be approved to proceed as planned under observation that the development dimensions do not extend beyond the proposed sites.</p> <p>2. The recorded historical farmstead is older than 60 years and is thus protected by Section 34 of the NHRA.</p> <p>3. Although the historical farm house, stock kraal is in a poor state of conservation, they must be assessed and documented. They must not be destroyed without a permit from PHRA as prescribed in Section 34 the NHRA.</p> <p>4. The recorded burial site must be demarcated by a danger warning sign and must be clearly marked to avoid any accidental damage by heavy mining equipment and haulage trucks.</p> <p>5. The applicant must ensure that the descendants of the recorded graves are sought, and notified about this proposed mining development has an impact (directly or indirectly) on their burial site.</p> <p>6. No stone robbing, or removal of any material is allowed. Any disturbance or alteration on this burial site would be illegal and punishable by law, under Section 36(3) of the NHRA.</p> <p>7. Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51. (1).</p> <p>8. Noteworthy that any measures to cover up the suspected archaeological material or to collect any resources is illegal and punishable by law. In the same manner, no person may exhume or collect such remains, whether of recent origin or not, without the endorsement by SAHRA.</p> <p>9. The footprint impact of the proposed mining development and associated infrastructure should be kept to minimal to limit the possibility of encountering chance finds.</p>
Paleontological sites disturbed/destroyed	Negative	
Cultural places disturbed/destroyed	Negative	

		<p>10. Should any unmarked burials be exposed during mining, affected families must be tracked and consulted, relevant rescue/relocation permits must be obtained from SAHRA before any grave relocation can take place. Furthermore, a professional archaeologist must be retained to oversee the relocation process in accordance with the National Heritage Resources Act 25 of 1999.</p> <p>11. Should chance archaeological materials or human burials remains be exposed during mining work on any section of the proposed mining development laydown sites, work should cease on the affected area and the discovery must be reported to the heritage authorities immediately so that an investigation and evaluation of the finds can be made. The overriding objective, where remedial action is warranted, is to minimize disruption in mining scheduling while recovering archaeological and any affected cultural heritage data as stipulated by the PHRA and NHRA regulations (see appended Chance Find procedure for further details).</p> <p>12. The project Public Participation Process should ensure that any cultural heritage related matters for this project are given due attention whenever they arise and are communicated to PHRA throughout the proposed project development. This form of extended community involvement would pre-empt any potential disruptions that may arise from previously unknown cultural heritage matter that may have escaped the attention of this study.</p> <p>13. The landowner must be requested to declare burial sites within their farmsteads to the EAP.</p> <p>14. Subject to the recommendations herein made and the implementation of the mitigation measures and adoption of the project EMP there are no other significant cultural heritage resources barriers to the proposed mining right application. The Heritage authority may approve the proposed development to proceed as planned with special commendations to implement the recommendations here in made.</p>
<b>Traffic</b>		
<b>Increased traffic volumes on the existing road networks</b>	Negative	<ul style="list-style-type: none"> <li>• Implement speed limits and safety controls on-site.</li> <li>• Construct access roads within safety limits from other crossings.</li> <li>• Possible road upgrades where required.</li> <li>• Create safe environment for pedestrians, animals and motorists.</li> <li>• Create fauna underpasses where necessary (e.g. bridge crossings).</li> </ul>
<b>Roads and vehicles</b>	Negative	<ul style="list-style-type: none"> <li>• Speed limits must be in place on site and before access roads on a provincial or national road.</li> <li>• Ensure drivers are trained in road safety.</li> </ul>

<b>Surrounding neighbours</b>	Negative	<ul style="list-style-type: none"> <li>• Personnel are not permitted on other properties without permission.</li> <li>• Avoid conflict with surrounding landowners.</li> <li>• Safety specialist will be appointed, and assessments will be conducted. Recommendations will be implemented.</li> </ul>
<b>Air quality</b>		
<b>Dust pollution</b>	Negative	<ul style="list-style-type: none"> <li>• The removal of vegetation will be minimised during stripping to reduce the effects of dust pollution as a result of exposed soil.</li> <li>• Water or dust control agents must be used in working areas, and roads will be sprayed for dust suppression on a regular basis in designated susceptible areas during heavy usage.</li> <li>• Dust monitoring must be undertaken in accordance to the monitoring programme.</li> <li>• Reduction of dust fallout levels and particulate matter.</li> <li>• All sand haul trucks must be covered by a tarpaulin.</li> </ul>

## 19.2 Mitigation measures

The impacts that are generated by development can be minimised if measures are implemented to reduce the impacts. The mitigation measures ensure that the development considers the environment and the predicted impacts to minimise impacts and achieve sustainable development. This will be assessed and discussed in more detail during the EIA phase.

## 19.3 Motivating the preferred site

As a result of the scoping phase impact assessment and the sensitivity mapping exercise, a preferred layout alternative will be identified and assessed in the EIA phase.

## 20 PLAN OF STUDY

The scoping phase identified potential environmental impacts and discussed alternatives considered. The following section outlines the proposed plan of study which will be conducted for the various environmental aspects during the EIA phase. It is important to note that the plan of study will be guided by comment obtained from I&APs and other stakeholders during the PPP of Scoping phase.

### 20.1 Impact assessment phase objectives

The impact assessment phase will have the following objectives:

- Identify and assess the environmental (biophysical and social) impacts of the construction, operation, decommissioning and post closure impacts of the proposed development. The cumulative impacts of the proposed development will also be identified and evaluated.
- Determine and assess alternative activities and locations in parallel with the proposed activity.

- Identify and evaluate potential management and mitigation measures that will reduce the negative impacts of the proposed development and enhance the positive impacts.
- Compile monitoring, management, mitigation and training needs in the EMPr.
- Provide the decision-making authorities with sufficient and accurate information to make a sound decision on the proposed development.

## 20.2 Impact assessment phase tasks

The impact assessment phase has four key elements, namely:

- **Specialist studies:** Specialist studies identified in the scoping phase and any additional studies that may be required by the authorities, will be conducted during the initial phase of the EIA. The relevant specialists will be appointed to conduct the various assessments. They will gather baseline information relevant to the study and assess impacts associated with the development. Specialists also make recommendations to mitigate negative impacts and optimise benefits. The resulting information is synthesised into the draft EIA report that will be made available to I&APs for review.
- **Environmental Impact Assessment report (EIAR):** The main purpose of this report is to gather environmental information and evaluate the overall impacts associated with the project, consider mitigation measures and alternative options, and make recommendations in choosing the best development alternative. The EIAR identifies mitigation measure/management recommendations to minimise negative impacts and enhance benefits.

The draft EIAR and associated reports will be made available for public and authority review and comment for a period of thirty days as it was for scoping phase. The availability of the draft EIAR will be communicated to all registered I&APs and will be easily accessible. After comments have been received, the final EIAR will be compiled and submitted to the competent authority (DMR) for review. This report will assist the DMR in making an informed decision.

- **Environmental Management Programme report (EMPr):** The EMPr provides guidelines to the proponent and the technical team on how to best implement the mitigation measure/management recommendations outlined in the EIAR during the construction, operational and decommissioning/rehabilitation phase. The EMPr is a legally binding document, and once approved cannot be amended without permission from the DMRE.
- **Public Participation Process (PPP):** The PPP initiated during the scoping phase, is continued. This includes continuous engagement with I&APs and stakeholders, which includes meetings, receiving comments, issues and concerns raised by I&APs and the authorities during the review period, and also provides relevant responses to these comments.

### **20.3 Alternatives to be considered, including no-go option**

According to the MPRDA and NEMA regulations, feasible alternatives need to be considered and assessed during the scoping and impact assessment phase of the project. During the scoping phase, based on professional judgement of the EAP, the engineering designs, specialist inputs, and I&AP comments, must be considered. The alternatives identified must achieve the triple bottom-line of sustainability, i.e. they must meet the social, economic and ecological needs of the public. The alternatives must aim to address the key significant impacts of the proposed project by maximising benefits and avoiding or minimising the negative impacts. The primary objective must be to avoid all negative impacts, rather than minimise them. The “feasibility” and “reasonability” of and the need for alternatives must be determined by considering:

- The general purpose and requirements of the activity
- Need and desirability
- Opportunity costs
- The need to avoid negative impact altogether
- The need to minimise unavoidable negative impacts
- The need to maximise benefits
- The need for equitable distributional consequence

A comparative assessment (of all alternatives identified) will be conducted in accordance with the aforementioned criteria, as part of the impact assessment.

### **20.4 Aspects to be assessed as part of the EIA**

The following specialist studies will be assessed during the EIA phase:



Specialist studies:	
Soil and land capability assessment	Traffic Management Study
Geohydrology study	Heritage Impact Assessment
Biodiversity study	Surface water assessment and Floodline determination
Rehabilitation Plan	Integrated Water and Waste Management Plan
Wetland delineation and impact assessment (PES and EIS)	Surface and Storm Water Management Report
Geohydrological investigation, impact assessment and modelling	

In addition, the following will continue during the EIA phase:

- Public participation and consultation
- Environmental Management Programme
- Alternatives
- Site layout designs and Mining Works Programme

## 20.5 Proposed method of assessing environmental aspects and alternatives

Refer to section 20 for more details.

## 20.6 Stages at which the competent authority will be consulted

Competent authorities stated being consulted during the initial notification period, scoping phase and during the EIA phase.

A scoping phase meeting will be held with the DMRE and DWS, although initial contact has been made. No additional Authority meetings are scheduled during the scoping phase; unless an authority requires a meeting one will be arranged. The purpose of the Authority meeting would be to explain the project in detail to authorities and clarify the process going forward. Other stakeholders that will be included are the District and Local Municipalities, Ward Councillors, and others identified during the Scoping Phase.

The consultation process to be followed as part of the review and decision-making stages include:

- Scoping review and decision-making stage.
- Environmental impact assessment review and decision-making stage.
- The environmental authorisation decision making and appeal process stage.

## **20.7 Public participation process for the impact assessment**

Competent authorities, stakeholders and I&APs were and/or will be consulted during the initial notification period, scoping phase and EIA phase.

### **20.7.1 Steps to be taken to notify Interested and Affected Parties**

A detailed description of the PPP conducted for the scoping phase is described in Section 7 above and Appendix B. I&APs were notified of the proposed application via newspaper advertisements, emails, site and public notices, registered letters and facsimiles. The PPP will be undertaken in accordance with the NEMA process and the 2014 Regulations (as amended). A minimum of 30 days will be provided to the public to register as I&AP's and to provide initial comments, and 30 days will be provided to comment on the draft Scoping Report. The information submitted by I&AP's will be utilised during the Impact Assessment and compilation of the EIAR. Should the Final Scoping Report be accepted by the competent authority, an EIA process will be undertaken. During the EIA phase I&APs, stakeholders and the competent authorities will be notified of the process to be undertaken (similar way as described in Section 7 above and as outlined in the NEMA regulations (2014, as amended), will be provided an opportunity to comment on the draft EIAR which will include specialist studies and attend a public meeting).

### **20.7.2 Details of the engagement process**

The process of identifying and contacting landowners, stakeholders and I&APs commenced when I&APs were notified via site and public notices, newspaper adverts, emails and distribution of the BID. Landowner and his contact details was identified through the Title Deed search for the property. Proof of notifications and documentation pertaining to the PPP during scoping phase have been recorded and will be recorded also during environmental impact assessment phase.

During the EIA phase, I&APs will be afforded the following opportunities in order to participate in the project:

- I&APs will be requested via notifications to provide their comments on the project, notified when the draft EIAR will be available for review and notified of a public meeting that will take place

- The EIAR and EMPr will be available for comment for a period of 30 days at the same public places in the project area that the Scoping Report will be made available, sent to stakeholders who request a copy.

All comments and issues raised during the public comment period will be incorporated into the final EIAR and EMPr to be submitted to the competent authorities for review and the final decision-making stage. I&APs will be notified of the decision of the competent authority within fourteen days of receiving written letters and will specify any further process to be undertaken, like the appeal process.

### **20.7.3 Information which was provided during Scoping and will be provided to interested and affected parties during EIA phase.**

The following information was and/or will be made available to I&APs:

- **Background Information Document (BID):** The aim of the BID is to inform all I&APs of the proposed project and process followed during the scoping and which will be followed during EIA phase, which were/or are; the undertaking of the PPP and EIA for the compilation of the EIA, Environmental Management Programme for the proposed mining activities.
- The site plan, scale and extent of activities to be authorised.
- The draft scoping report, which included:
  - The plan of study:
    - List of activities to be authorized according to NEMA and NWA
    - Indication and discussion of the impacts of activities to be authorised
    - The proposed specialist studies that will be undertaken as part of the project
    - The proposed mining methods to be used
    - Discussion of alternatives, including location, process and methodology and no-go
    - Details of the MPRDA, NEMA, NEM:WA and NWA Regulations (including a list of other applicable regulations) that must be adhered to.
  - Draft EIR and EMPr (including results from the specialist assessments) will be made available for public review and comment for a period of thirty days.
  - Information will be made available as requested by the I&APs throughout the process.

### **20.8 Tasks that will be undertaken during the EIA**

The following tasks will be undertaken as part of the EIA phase of the project:

- Finalisation of the legislative context in which the activities will take place and documentation of the proposed activity and how it complies with this legislation.

- Finalisation of the activities triggered under NEMA and NEM:WA based on the specialist assessments and final design layout and specifications.
- Identification of the location of the development footprint in the preferred site based on impact and risk assessment process. This includes cumulative impacts and ranking of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment.
- Identification of the most ideal location for the activities in the preferred site based on the lowest level of environmental sensitivity identified during the assessment, especially with the proposed siting of the mining infrastructure.
- Determination of the nature, significance, consequence, extent, duration and probability of the impacts occurring to identify preferred alternatives and the degree to which these impacts can be reversed, may cause irreplaceable loss of resources, can be avoided, managed or mitigated.
- Identification of suitable measures to avoid, manage or mitigate identified impacts
- Detailed specialist studies
- Continued PPP
- Compilation of the draft EIAR and EMPr and, once the consultation, review and commenting period has finished, the finalisation of the EIAR and EMPr, which will be submitted to the CA (Competent Authority) for review and final decision making.

#### ❖ SUMMARY OF NEXT STEPS IN THE EIA PROCESS.

The next step will be to finalise the specialist studies that will inform the impact assessment. During the impact assessment phase, the issues raised by stakeholders and the potential impacts of the proposed project on the environmental and socio-economic status of the area will be examined in detail. Stakeholder issues will therefore assist to drive the EIA process. When complete, the findings of the specialist studies will be integrated into a single report, the Draft EIA Report and EMPR. The report will then be made available for stakeholder comment, after which it will be finalised and submitted to the decision making Authorities for a final decision.

## 20.9 Measures to avoid, reverse, mitigate, or manage identified impacts and determine the extent of the residual risks

Please refer to Table 18: Anticipated impacts.

## **21 OTHER INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

Compliance with the provision of Section 24(4)(a) and (b) read with Section 24 (3) (a) and (7) of the NEMA, the EIA must include the following.

### **21.1 Impact on the socio-economic condition of any directly affected person**

This is dependent on the results of the Social Impact Assessment which will also be addressed in the Social and Labour Plan (SLP). Full details will be made available during the EIA phase after the specialist studies have been conducted and consultation with the community, stakeholders and other I&APs.

The proposed Top One Construction and General Services mine will provide employment opportunities, skills development, social development programmes, community upliftment and economic injection to the local area. Furthermore, impacts including visual, traffic, service delivery, land use changes and security and safety will be assessed and discussed during the EIA phase.

### **21.2 Impact on any national estate referred to in Section 3(2) of the National Heritage Resources Act**

A specialist will be appointed by Singo Consulting (Pty) Ltd. The appointed specialist will conduct the first assessment during the scoping phase and the second phase of assessment during the EIA phase whereby full result of both phases will be made available.

### **21.3 Other matters required in terms of Section 24(4) (A) and (B) of the Act**

Section 24(4)(b)(i) of the NEMA (as amended), stipulates that an investigation must be undertaken to determine the potential consequences or impacts of the alternatives on the environment and assess the significance of these consequences or impacts, including the option of not implementing the activity. Alternatives have been discussed in Section 6 of this report and will be addressed in detail during the EIA phase once all specialist assessments and comments from I&APs, stakeholders and the competent authorities have been received.

## **22 ASSUMPTIONS, LIMITATIONS AND UNCERTAINTIES**

Certain assumptions, limitations, and uncertainties are associated with the scoping phase. This report is based on information that is currently available. The following limitations and assumptions are applicable:

- This report is based on project information provided by the client.

- This report is based on a project description taken from client meetings, preliminary drawings and design specifications for the proposed mine that have not yet been finalised and which are likely to undergo a number of iterations and refinements before they can be regarded as definitive and proposed methodology for the mining operations. Detailed information will be provided in the EIA phase.
- No specialist studies have been completed for the scoping phase. Descriptions of the environmental, economical and social environments are based on limited desktop assessments and available literature for the area. More detailed information will be provided in the EIA phase based on the outcomes of the specialist studies. Limited scoping-phase specialist input was obtained for inclusion in this report.
- The description of the baseline environment and, where possible, the updated information, has been obtained from various sources. More detailed information will be provided in the EIA phase based on the outcomes of the specialist studies, the finalisation of the Mining Works Programme and design layout.
- A detailed impact assessment was partially done at present; however, the levels of confidence is considered too low. Thus, full detailed impact assessment will be done once detailed specialist input and comments have been obtained from the I&APs, which will be presented and discussed in more detail during the EIA phase.

## 23 UNDERTAKING

The EAP herewith confirms:

- a) The correctness of the information provided in the reports.
- b) The inclusion of comments and inputs from stakeholders and I&APs.
- c) The inclusion of inputs and recommendations from the specialist reports where relevant.
- d) That the information provided by the EAP to I&APs and any responses by the EAP to comments or inputs made by I&APs are correctly reflected herein.

-END-

## 24 EAP DECLARATION

I, \_\_\_\_\_ declare that:

General declaration:

- I act as the independent EAP in this application.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant.
- I declare that there are no circumstances that may compromise my objectivity in performing such work.
- I have expertise in conducting Environmental Impact Assessments (“EIAs”), including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity.
- I will comply with the Act, Regulations and all other applicable legislation.
- I will take into account, as far as possible, the matters listed in Regulation 8 of the Regulations when preparing the application and any report relating thereto.
- I have no, and will not engage in, conflicting interests in the undertaking of the activity.
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority.
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to I&APs and the public and that participation by I&APs is facilitated in such a manner that all I&APs will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application.
- I will ensure that the comments of all I&APs are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments

made by I&APs in respect of a final report may be attached to the report without further amendment to the report.

- I will keep a register of all I&APs that participated in a PPP.
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.
- All the particulars furnished by me in this form are true and correct.
- I will perform all other obligations as expected from an EAP in terms of the Regulations.
- I realise that a false declaration is an offence in terms of Regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

**Disclosure of vested interest (delete whichever is not applicable)**

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity other than remuneration for work performed in terms of the Regulations.
- I do not have any vested interest in the proposed activity other than remuneration for work performed in terms of the NEMA regulations.

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Signature of the EAP

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Name of company

---

Date



Appendix 1: DMRE Correspondence



mineral resources  
& energy

Department  
Minerals Resources and Energy  
REPUBLIC OF SOUTH AFRICA

Private Bag X7279, Witbank, 1035, Tel: 013 653 0500, Fax 013 690 3288, Saveways Centre, First Floor, Mandela Drive, Witbank, 1035, Mpumalanga Province, Directorate: Mineral Regulation: Mpumalanga Region Subdirector: Mineral Laws Enquiries: Me S Sekgetho Email Address: seapei.sekgetho@dmre.gov.za Ref: MP 305/1/2/2/10335 MR.

**BY EMAIL/FAX**

[kenneth@singoconsulting.co.za](mailto:kenneth@singoconsulting.co.za)

The Members

**Top One Construction & General Services CC**

P/BAG 7297

**EMALAHLENI**

1035

Dear Sir/Madam

**APPLICATION FOR MINING RIGHT IN TERMS OF SECTION 22 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) [HEREIN AFTER REFERRED TO AS THE ACT] AS AMENDED BY SECTION 18 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT AMENDMENT ACT, 2008 (ACT 49 OF 2008) [HEREINAFTER REFERRED TO AS THE AMENDMENT ACT: PORTION OF PORTION 27 OF THE FARM MIDDELBURG TOWN AND TOWNLANDS, SITUATED IN THE MAGISTERIAL DISTRICT OF MIDDELBURG.**

1. I refer to the abovementioned matter and confirm that your application for a mining right in terms of section 22(2) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) as amended by section 18 of the Amendment Act 2008 (Act 49 of 2008) has been accepted for **Sand general**.
2. In terms of Section 18(4) (a) and(b) as amended, you are required to submit:
  - 2.1 The required environmental reports and documents as stipulated at your acknowledgement of receipt of an environmental authorisation in this regard.

- 2.2 In light of the minimum requirements as stipulated on Regulation 16(1) and 16(2) of the EIA Regulations, your application for an Environmental Authorisation was incomplete as it was not accompanied by this acceptance letter as per Sub Regulation 16(1)(ix) and considering that it is now completed by this acceptance letter, you are hereby required to submit the documents as stipulated on Regulation 19(1) to 19(8) of the EIA Regulations(only in cases where Basic Assessment Report is applicable) or Regulations 21 (Scoping Report) and Regulation 23 (EIR and EMP) (In case of Scoping Report).All timeframes are effective from the date of this letter
3. To notify and in writing consult with the landowner (s) or lawful occupier(s) and all interested and affected parties (I and AP) and upload the results of such consultation within 180 days from the date of this letter.
4. Should the land be owned by the communities of a Trust on Behalf of the community, a proper and thorough consultation process must be engaged upon and a legitimate Tribal Resolution or consent must be obtained from the Traditional Authority/ Council or Trust and be submitted with the results consultation.
5. In other for your application to comply with the ownership element in your prospecting right in furthering the objects of Section 2(d) read together with Mining Charter, your shareholding must achieved the target which is the minimum of 30% BEE shareholding in terms of the 2018 Charter and must be distributed in the following manner:
- (i) A minimum of 5% non-transferable carried interest to qualifying employees from the effective date of a mining right.
  - (ii) A minimum of 5% non-transferable carried interest or minimum 5% equity equivalent benefit as defined herein to host communities from the effective date.
  - (iii) A minimum of 20% effective ownership in the form of shares to a BEE which Entrepreneur, 5% of which must preferably.

You are therefore urged to consider aligning your shareholding with the 2018 Charter.

6. You are advised to apply for water use licence from the Department of Water and Sanitation.

Do not hesitate to contact us, should you need clarity

Yours Faithfully:

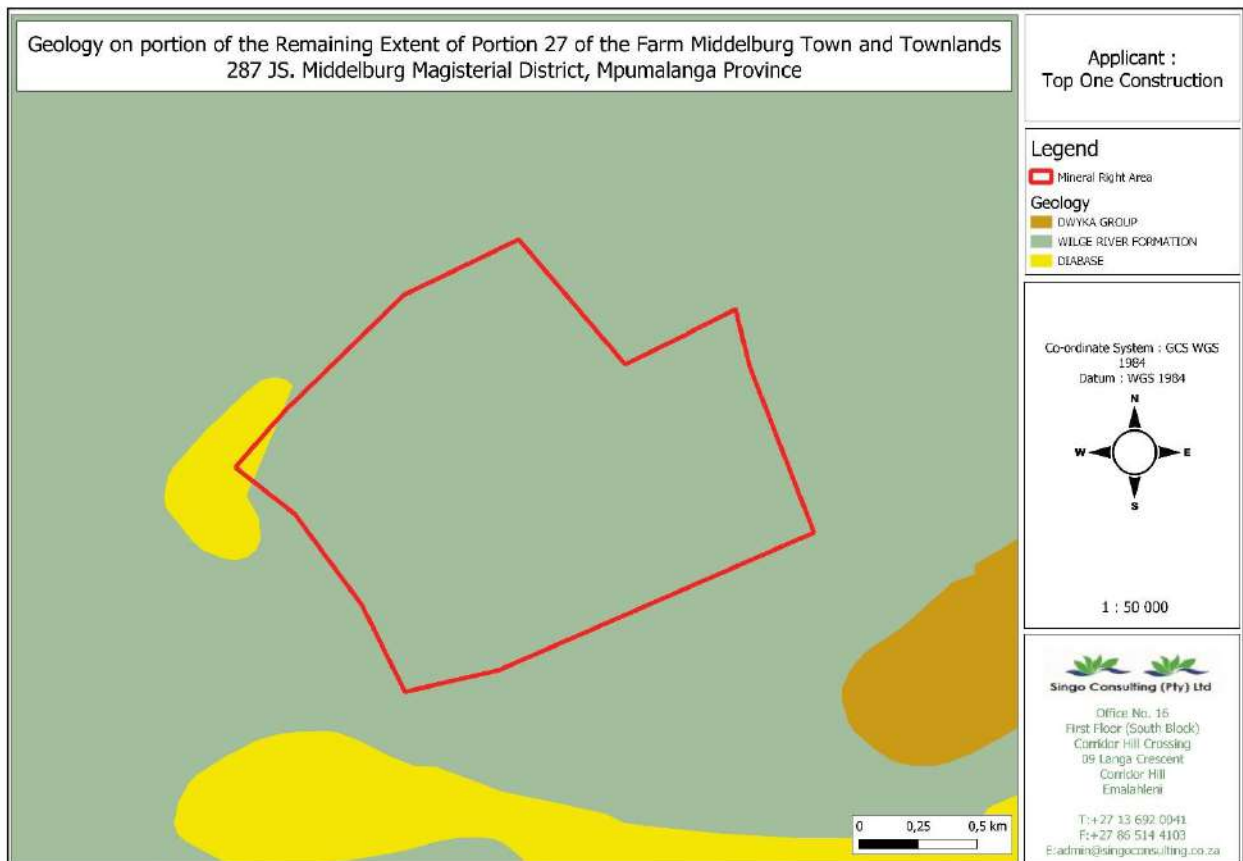
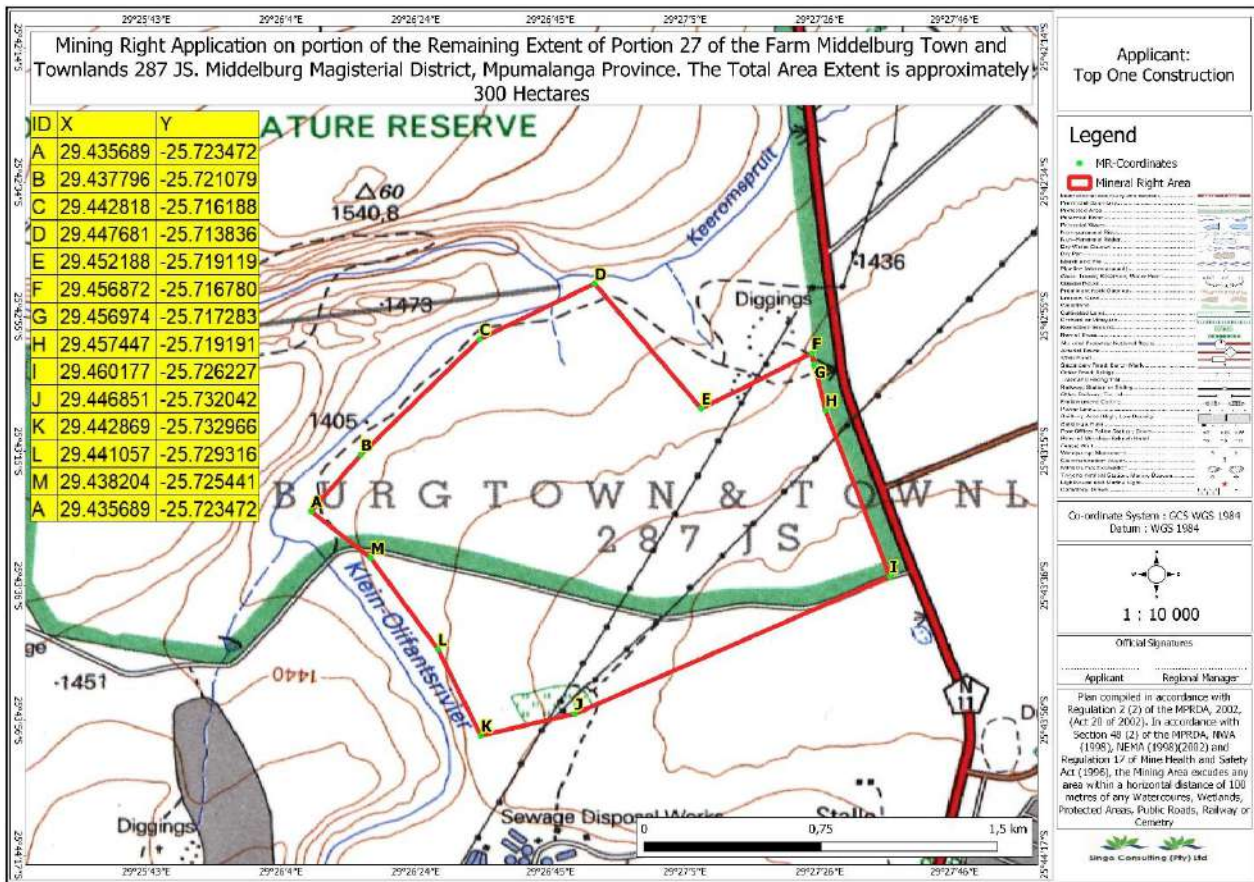


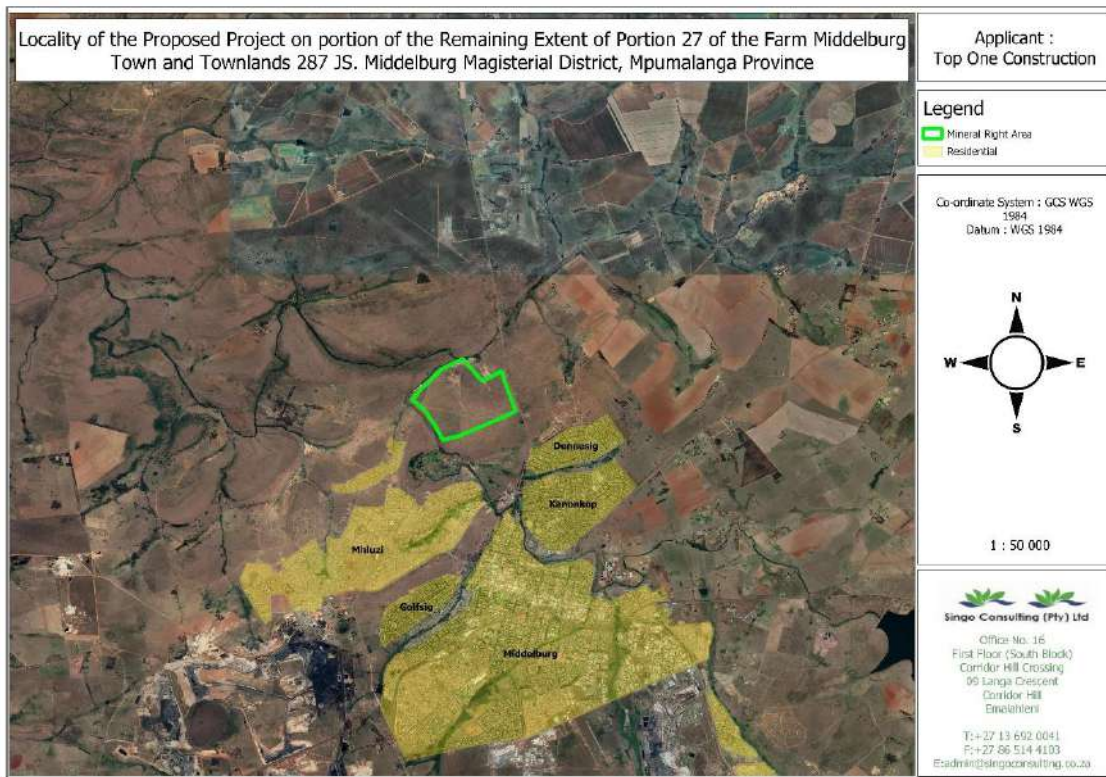
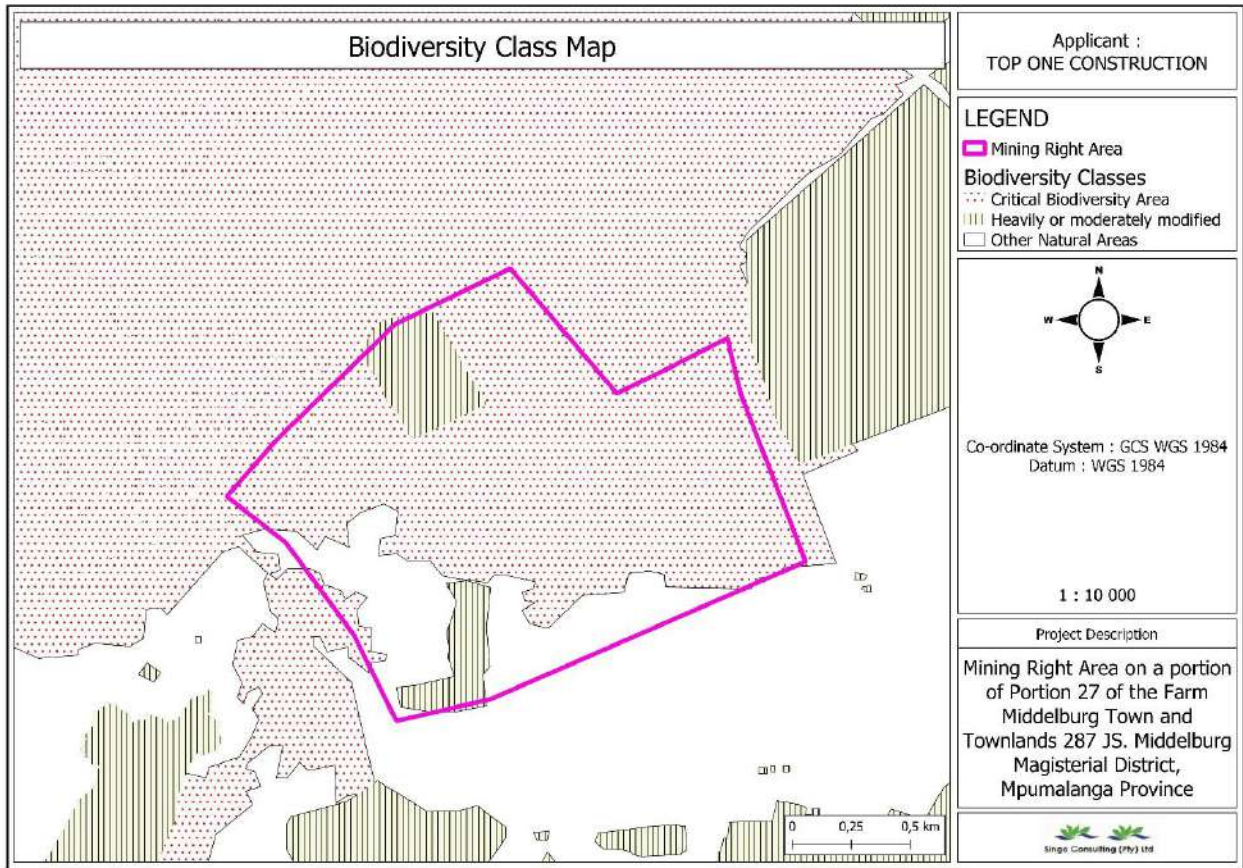
**REGIONAL MANAGER  
MPUMALANGA REGION**

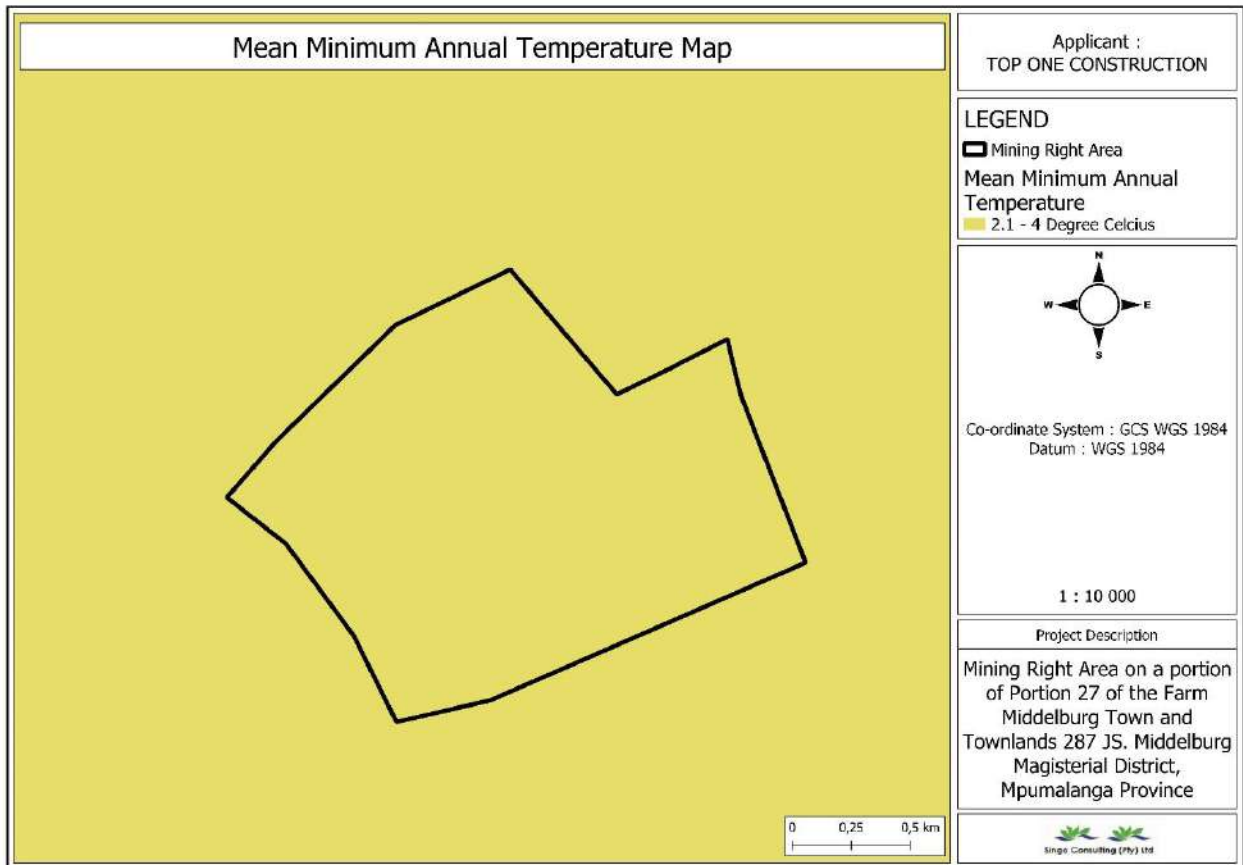
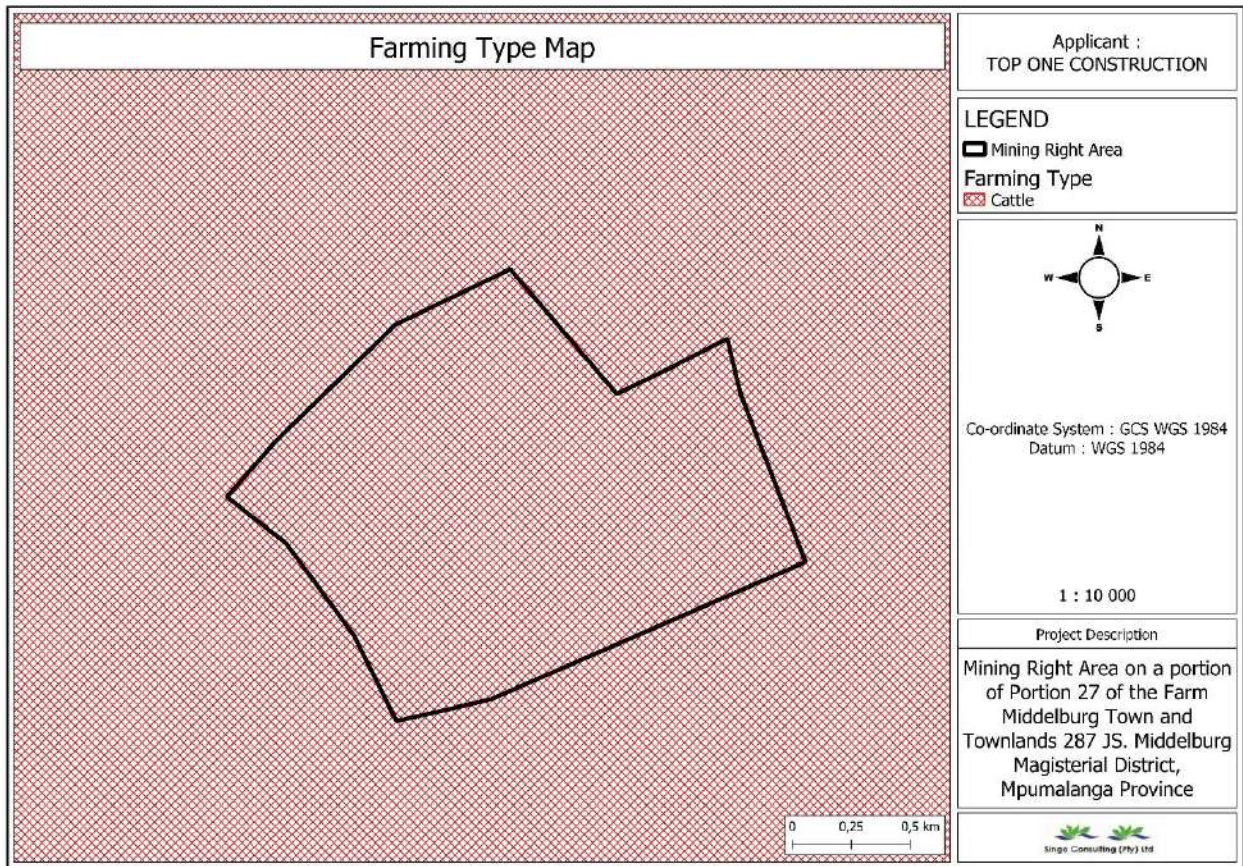
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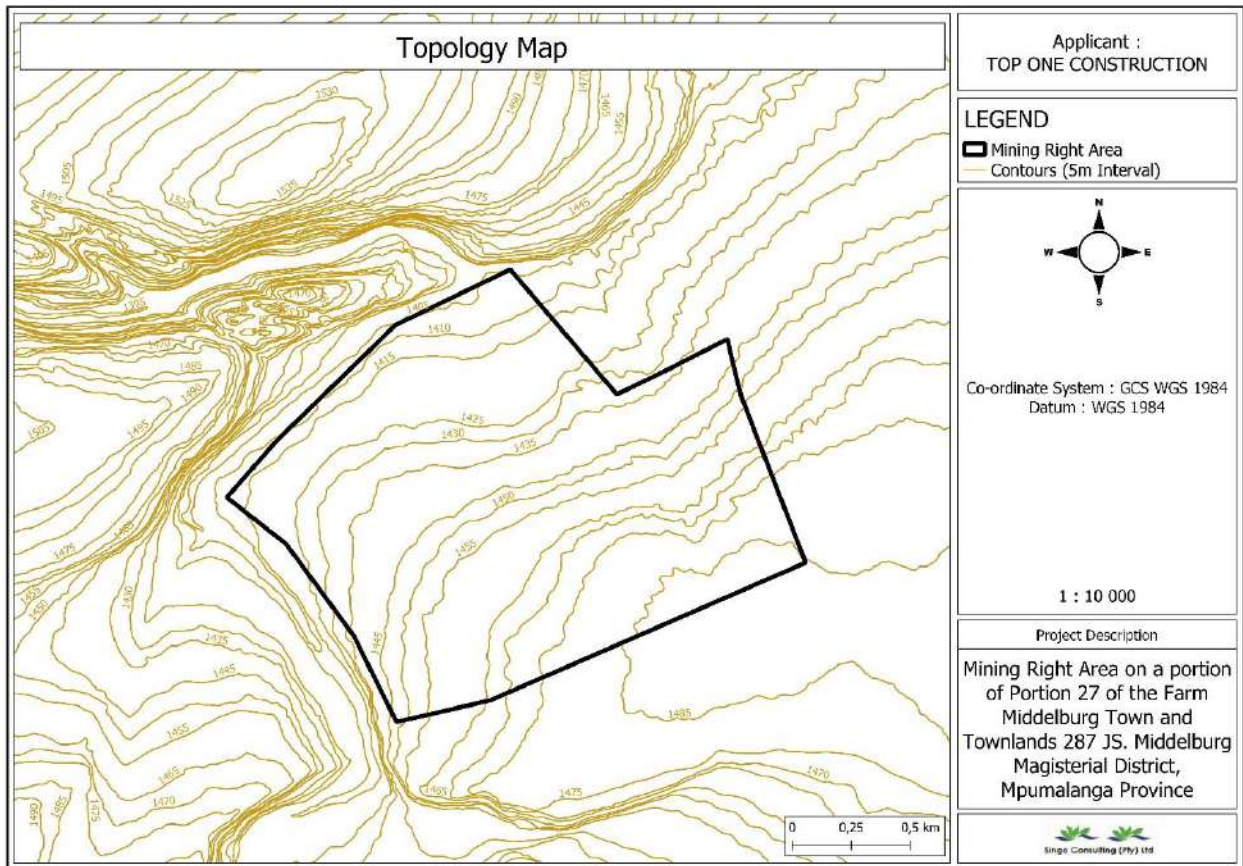
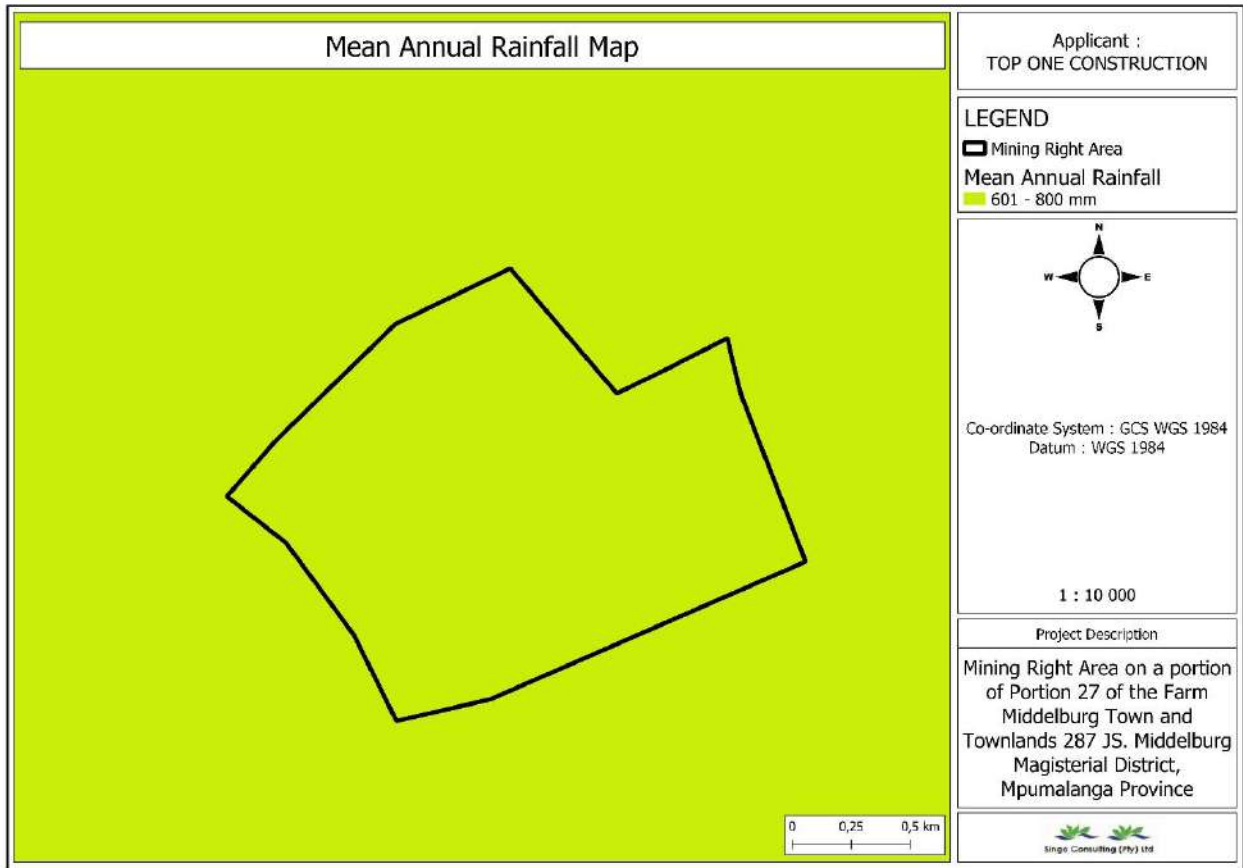
**Appendix 2: EAP CV**

Appendix 3: Project Maps

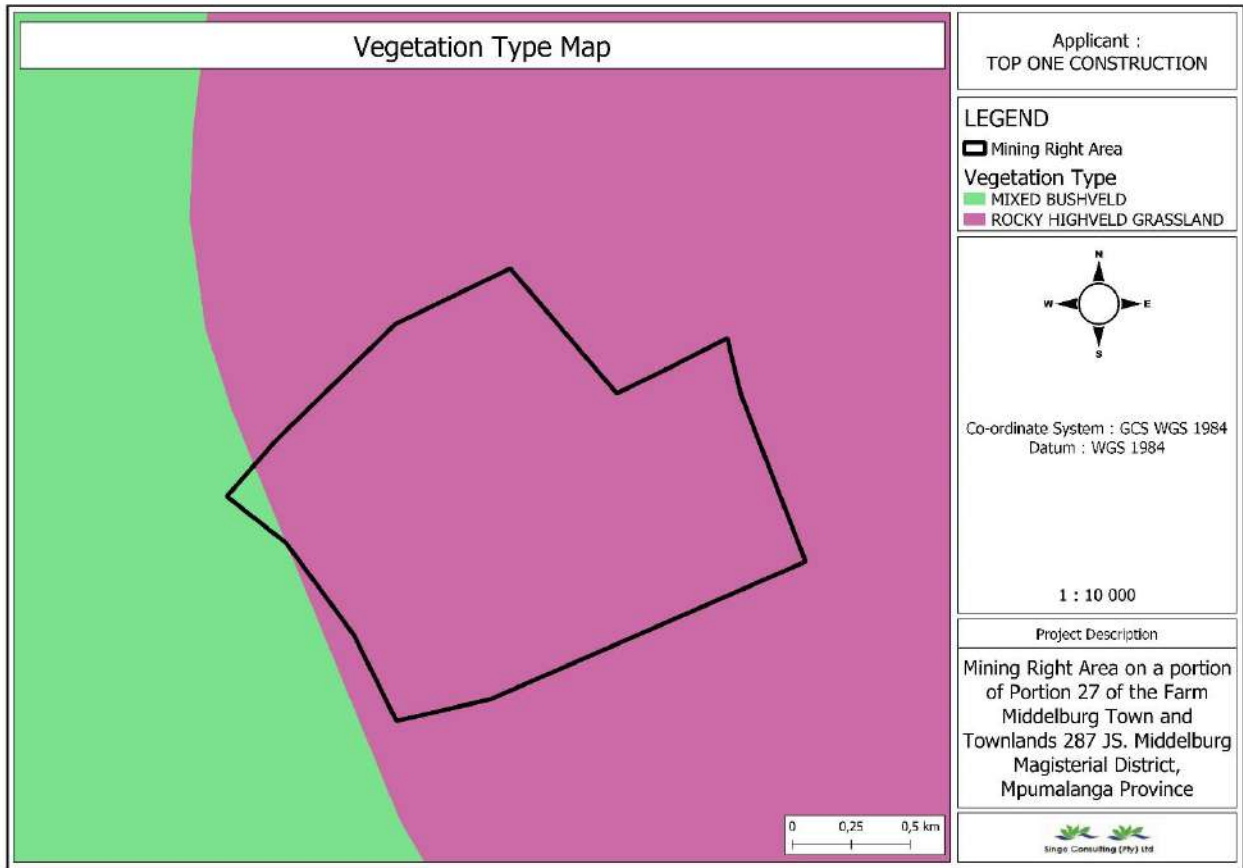


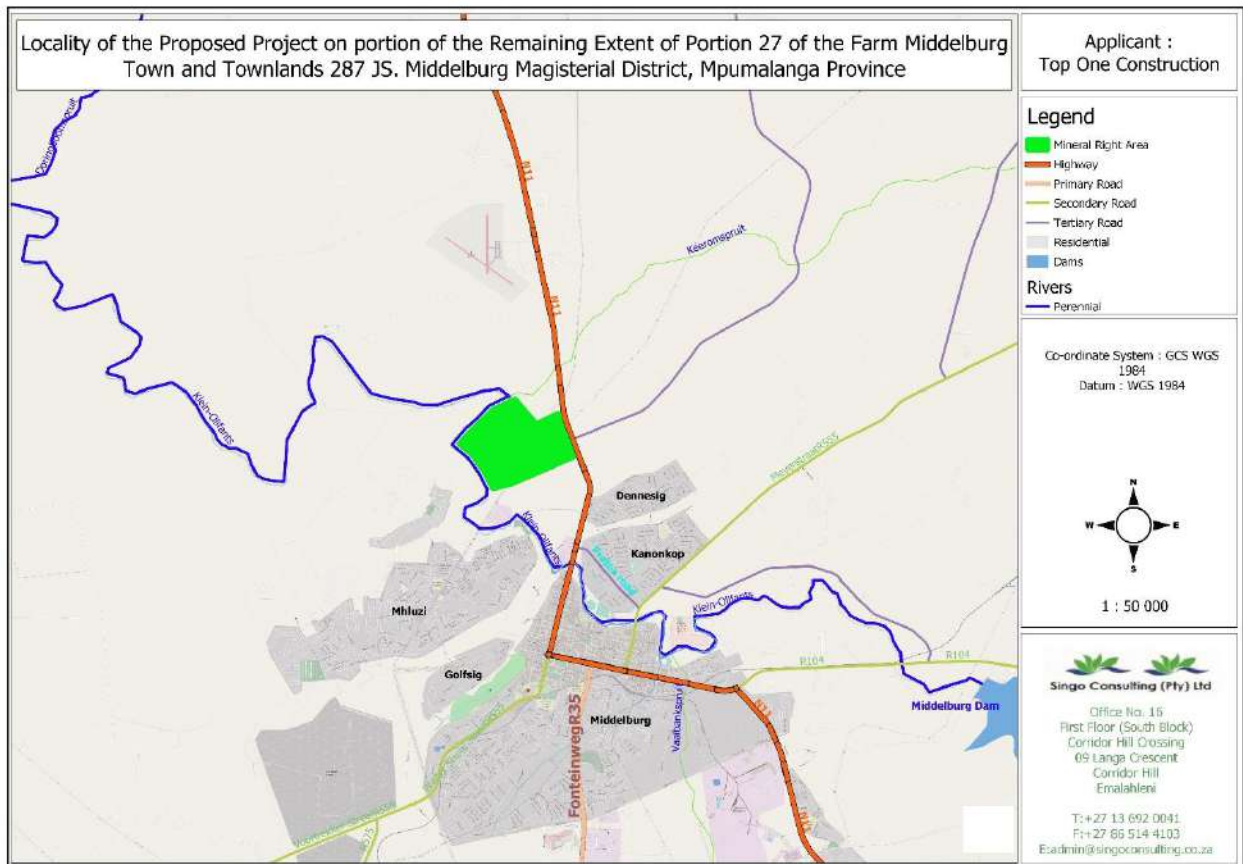
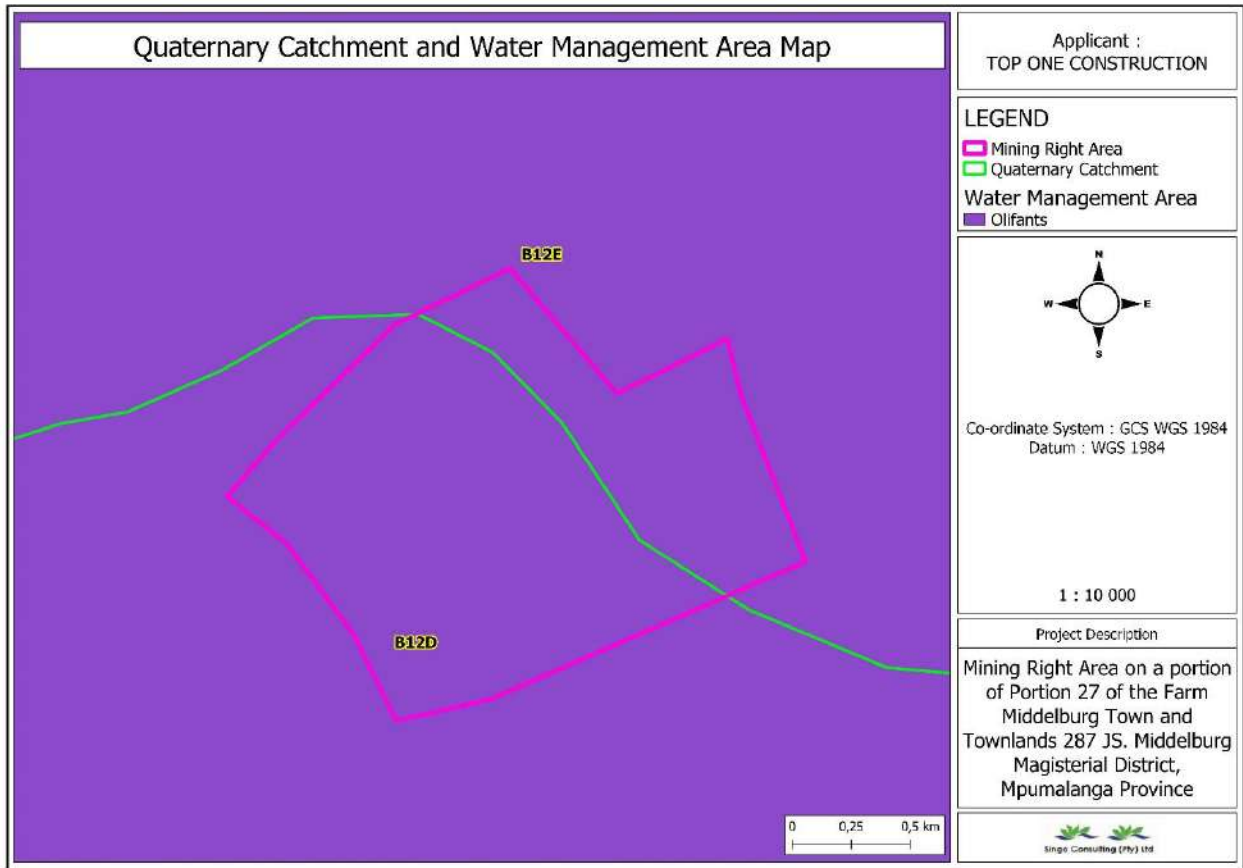


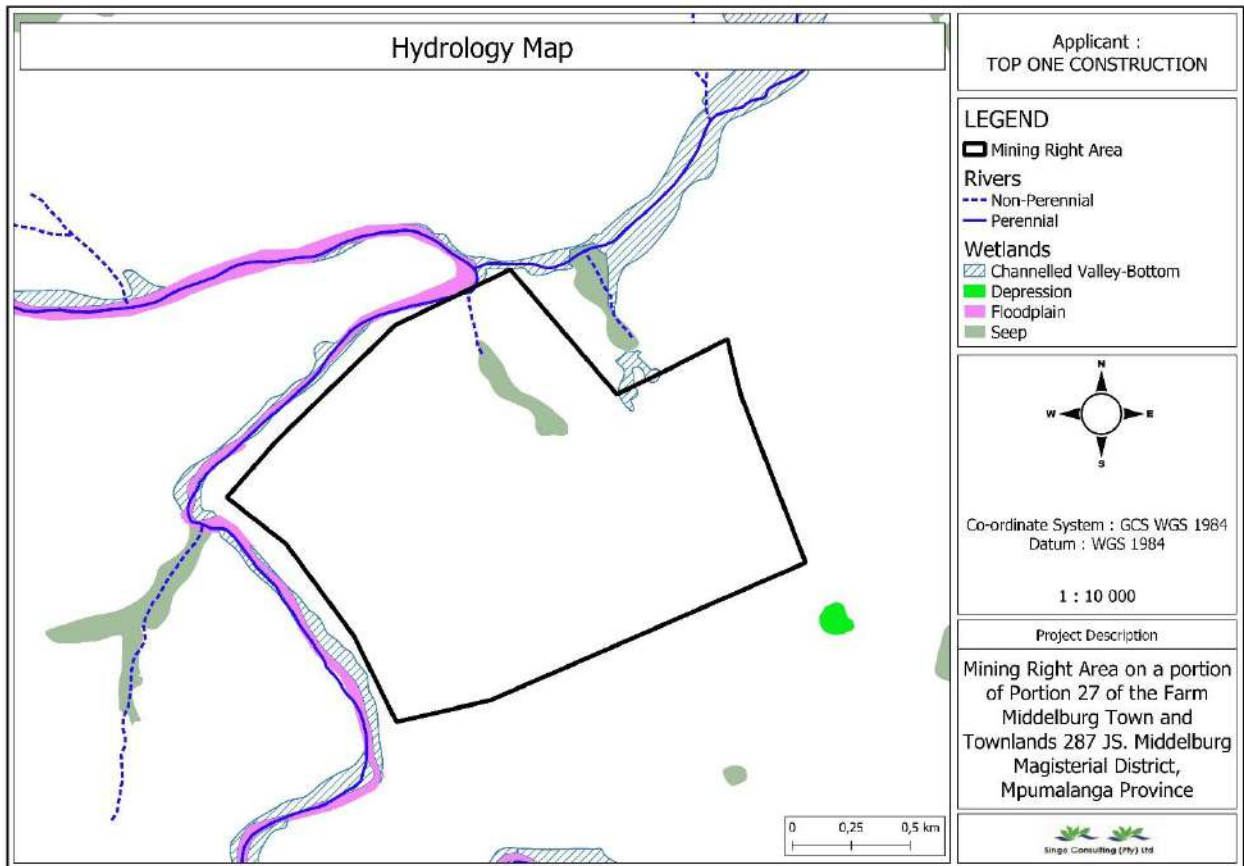
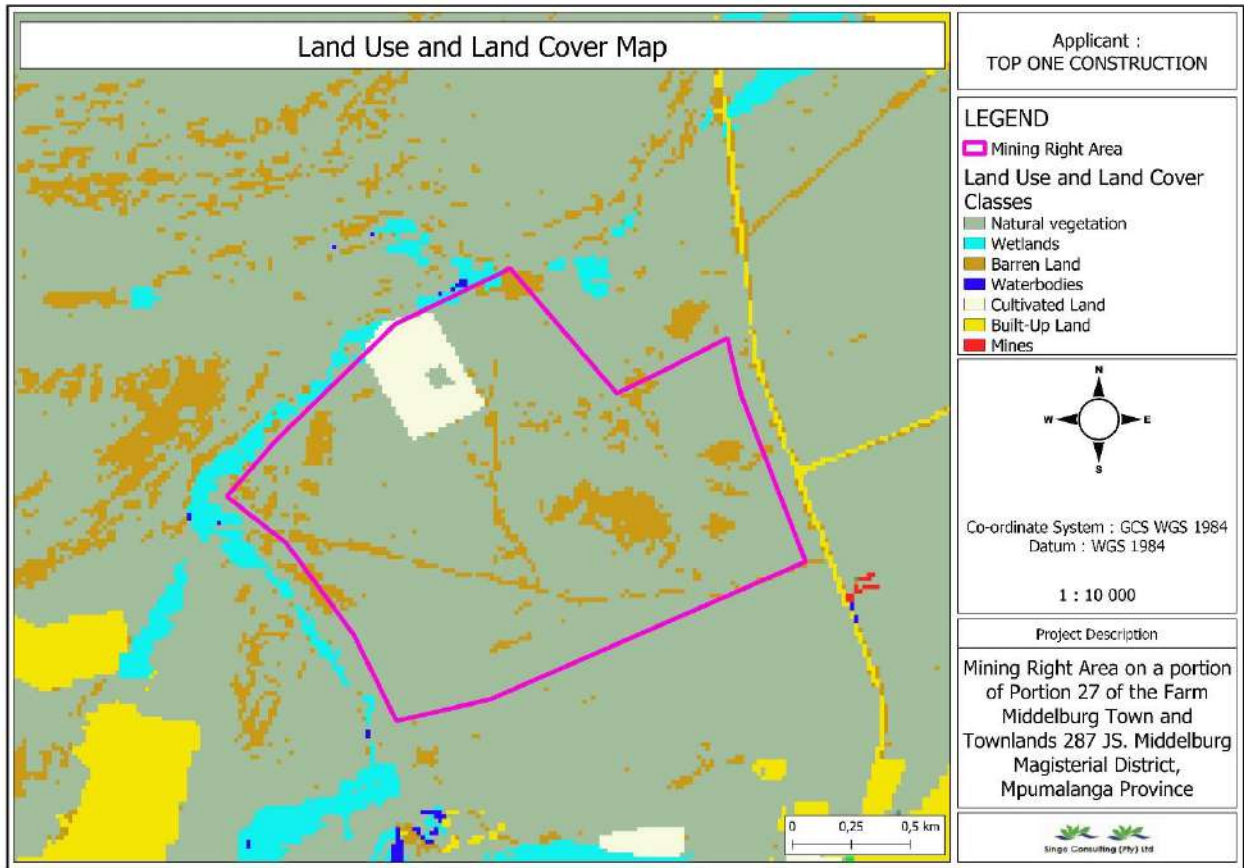












Appendix 4: Public Participation followed

4B: Background Information Document

MP 30/5/1/2/2/10335 MR

## Background Information Document (BID)

SAND MINING RIGHT, ENVIRONMENTAL AUTHORIZATION (INTEGRATED ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT) AND WATER USE LICENSE APPLICATIONS PORTION OF PORTION 27 OF THE FARM MIDDELBURG TOWN AND TOWNLANDS 287 JS UNDER THE MAGISTERIAL DISTRICT OF MIDDELBURG, MPUMALANGA PROVINCE.

DMRE REFERENCE NUMBER: MP 30/5/1/2/2/10335 MR



Prepared by:



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## 1.1 INTRODUCTION

**Top One Construction and General Services** has applied for a mining right in terms of the Minerals and Petroleum Resources Development Act (Act No.28 of 2002) (MPRDA) (as amended) over portion of portion 27 of the farm Middelburg Town and Townlands 287 JS, DMRE Ref: **MP 30/5/1/2/2/10335 MR**.

This project is intended to acquire a mining right as a result subject to an application for an Environmental Authorization in terms of the National Environmental Management Act (NEMA), Act 107 of 1998 and a Water Use License in terms of the National Water Act, Act No. 36 of 1998 (NWA).

Top One Construction and General Services appointed Singo Consulting (Pty) Ltd as an independent Environmental Assessment Practitioner (EAP), to complete the necessary environmental applications and oversee the various specialist studies:

Various Specialist studies:	
Agricultural Impact Assessment study	Emergency Preparedness Plans
Geohydrology study	Heritage study
Biodiversity study	Hydrological Study
Noise Impact Assessment	Integrated Water Management
Mining Right Layout	Paleontology
Air Quality Management	Wetland Delineation Study
Risk Assessment Report	Soil study
Rehabilitation Plan	Surface and Storm Water Management Report
Traffic Management Study	

## 2. LOCATION

The proposed Mining Right area is located on portion of portion 27 of the farm Middelburg Town and Townlands 287 JS in Middelburg under the Jurisdiction of the Steve Tshwete local municipality within the Nkangala District Municipality, Mpumalanga Province.

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The project area is covering approximately 300 hectares (ha) in extent. The project area is located approximately 3km North-East of Mhluzi, approximately 5.36 km North-West of Middelburg and approximately 13.46km South of Doornkop.

### 3. PURPOSE OF THE BACKGROUND INFORMATION DOCUMENT

➤ **The purpose of this document is to:**

- Provide background information to landowners and Interested and Affected Parties (I&APs) on the proposed prospecting activities,
- Consult stakeholders and provide them the opportunity to register as I&APs
- Announce the availability of a draft Scoping Report available for public review and comment
- Obtain I&AP comments and contributions to incorporate these into environmental reporting

➤ **THE ROLE OF I&AP'S**

Communities, neighbors, government representatives, stakeholders such as community leaders, Non-governmental organizations (NGO) are being invited to participate in the EIA process by means of published advertisements, site notices and written correspondence. I&APs are invited to assist in:

- Identifying issues of concern to be investigated, as well as possible impacts of the project on the natural & social environment.
- Suggesting alternative means in which to mitigate possible negative impacts and enhance positive impacts.

You are hereby invited to participate freely and submit any questions or information you feel may contribute to the process. All comments received will be recorded and addressed as part of the environmental impact assessment process. Please complete the attached comment form (APPENDIX A).

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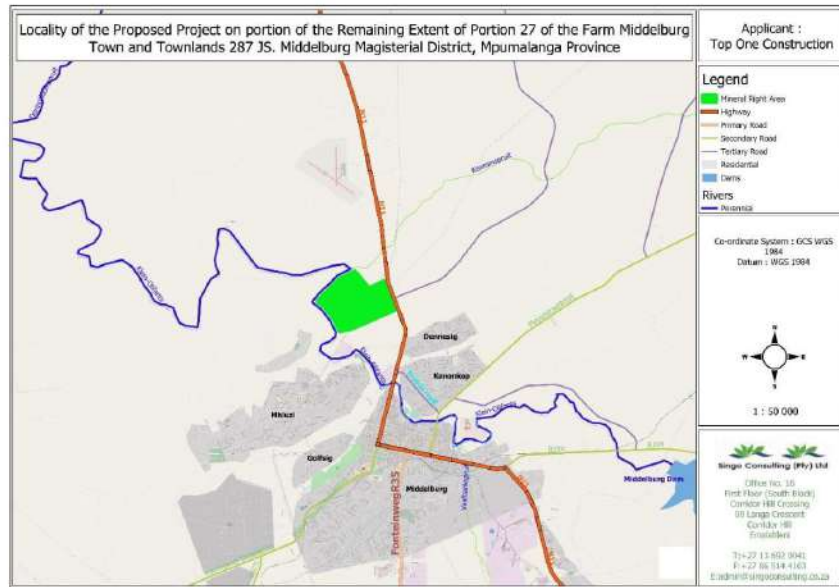


Figure 1: Locality Map of the project area.

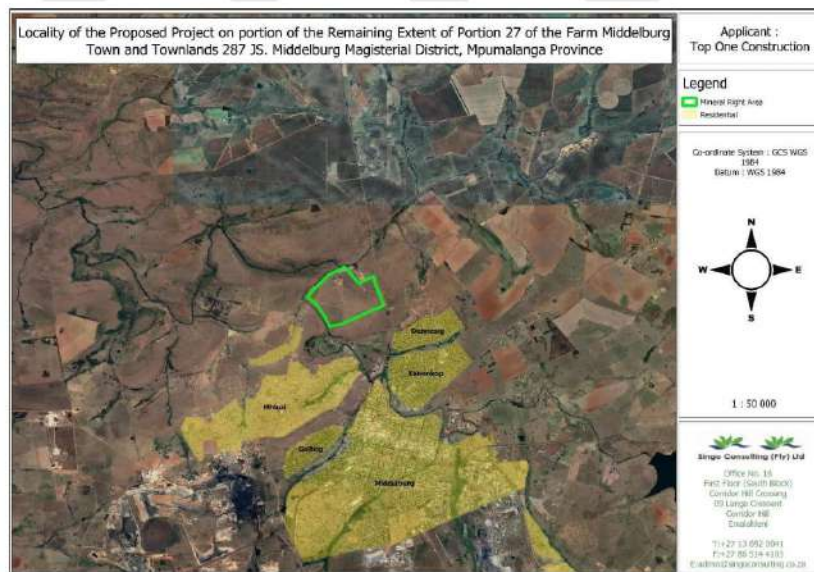


Figure 2: Shows the Google Earth View of the proposed area.

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#### 4. Project Overview

**Mineral Applied for:** Sand general

**Mining Methods:** Sand stripping Mining

**Life of Mine:** 30 years lifespan

#### Mining Method and Associated Infrastructures

- Mining Method

Sand mining methodology is justified by simply mining the commodity by stripping and haulage. The sand is expected to be excavated up to 3m deep. There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage. A sand miner would require basic equipment such as a dozer to clear vegetation and build access roads, an excavator or front-end loader to scoop up sand from the deposit, and trucks to carry the sand away.

The following infrastructure are required for the establishment of the sand mining operations:

- ❖ Haul roads
- ❖ Waste dump areas for vegetation
- ❖ ROM stockpiles for the sand
- ❖ Clean water cut-off canals around the: ROM stockpile area. Along the haul roads, around the waste dumps and Dirty water catchment drains.
- ❖ In-pit sumps for water management
- ❖ Piping system for water management and PCD.
- ❖ Mining contractor's laydown area (compacted pads for the purpose of placing and/ or erecting offices, workshops, diesel farm, etc.)
- ❖ Waste facility pad

There are no preparations needed for sand, as there are no chemicals or crushing required. The sand will be mined by stripping and haulage.

#### Service Requirements:

- ❖ Electricity for the operation will be sourced from Eskom (8MVA required).
- ❖ Process water will be sourced from the river and tributaries around, upon granting of the WUL.



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- ❖ It is envisaged that potable/ domestic water will be sourced from boreholes on site, other alternatives are also being considered.
- ❖ General waste will be collected for disposal at the registered Municipal dump.
- ❖ Sewage will be collected within conservancy tanks to be emptied by honey sucker for treatment at a suitably licensed facility. Alternatively, a small, package sewage plant will be installed on site.

**Employment:**

- ❖ The project will create employment for people near the project area.

**5. LEGISLATIVE PROCESS**

In order for the proposed mine to operate, the applicant is required to submit an application for a mining right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) with the Department of Mineral Resources and Energy (DMRE). In support to the application to obtain the mining right, the applicant is required to conduct a Scoping and Environmental Impact Assessment (S&EIA) process that needs to be submitted to the DMRE for adjudication, which includes activities triggered under the Environmental Impact Assessment Regulations of 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (Act 107 of 1998).

The extent of the mining right entails a life of mine of 30 years and covers the above-mentioned farm and portion. The proposed sand strip mining operations constitutes various listed activities which have been listed within the scheduled activities in Government Notice Regulation No 324, 325 and 327 (amended 7 April 2017) and therefore require an integrated Scoping and EIA process to be followed. Prior to any listed activity being approved by the DMRE, it is required that an environmental process is undertaken and a report is submitted to the relevant environmental authority for consideration. The purpose of the S&EIA process is to ensure that potential environmental, economic and social impacts associated with operation and closure/ rehabilitation of a project are identified, assessed and appropriately managed. There are two primary phases, namely the scoping phase and the impact assessment phase. These two phases are discussed in more detail below:

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✓ **Scoping Phase**

The scoping phase is conducted as the precursor to the Environmental Impact Assessment (EIA) process during which:

- Project and baseline environmental information is collated. Baseline information for the scoping report is gathered through visual inspections during field visits of the proposed project area and surroundings, desktop studies which include GIS mapping, and review of existing reports, guidelines and legislation.
- Landowners, adjacent landowners, local authorities, environmental authorities, as well as other stakeholders which may be affected by the project, or that may have an interest in the environmental impacts of the project are identified.
- Interested and affected parties (I&APs) are informed about the proposed project.
- Environmental authorities are consulted to confirm legal and administrative requirements.
- Environmental issues and impacts are identified and described.
- Development alternatives are identified and evaluated, and non-feasible development alternatives are eliminated.
- The nature and extent for further investigations and specialist input required in the EIA phase is identified.
- The draft and final scoping reports are submitted for review by authorities, relevant organs of state and I&APs.
- Key I&AP issues and concerns are collated into an issues and response report for consideration in the EIA phase.

✓ **EIA Phase Process**

After the initial scoping phase, the EIA phase of the application includes:

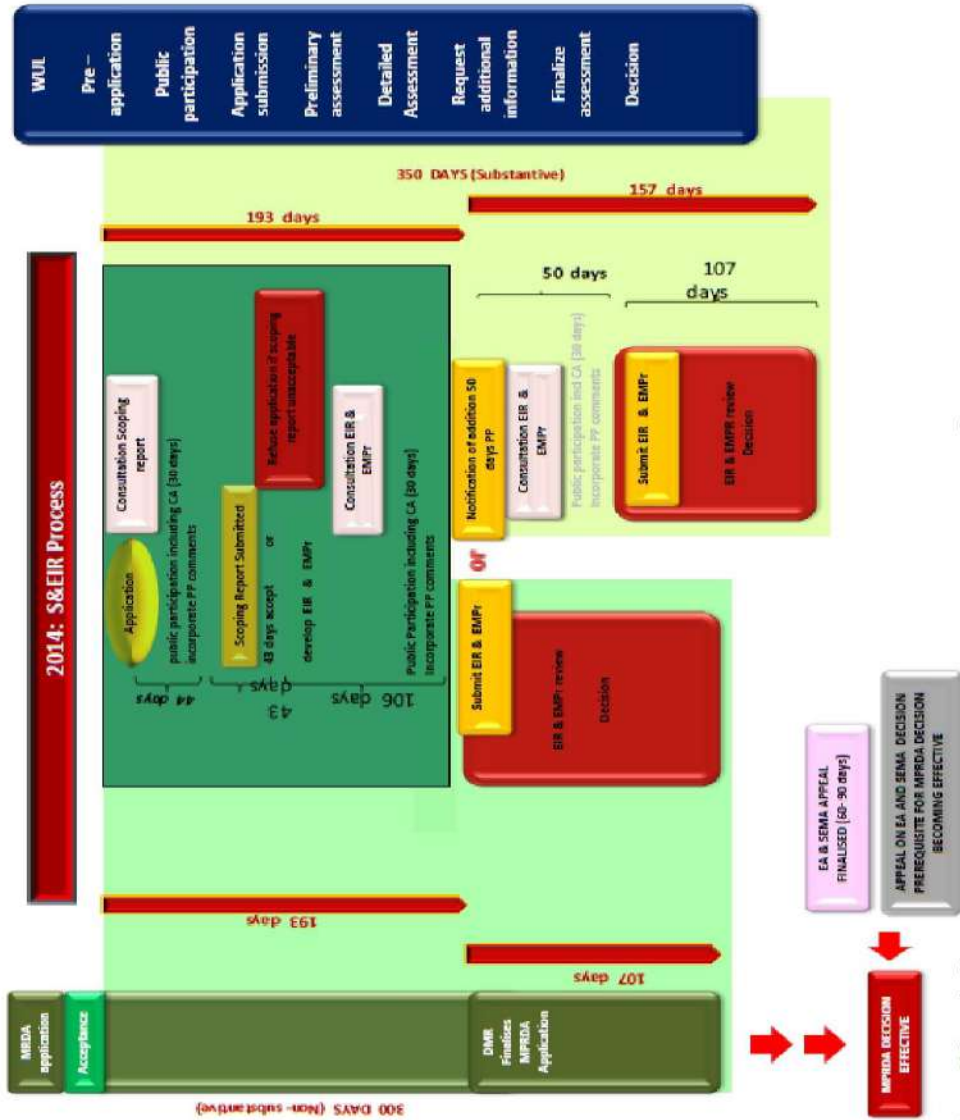
- Specialist investigations are undertaken in accordance with the terms of reference established in the scoping assessment (plan of study for EIA appended to the scoping report). The scope for specialist work is determined accordingly to the nature and scale of the project impacts.
- An evaluation of development alternatives and identification of a proposed option.
- An assessment of existing impacts (no-go development option), environmental impacts that may be associated with the proposed project option, and cumulative impacts using the impact assessment methodology.

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- Identification of mitigation measures to address the environmental impacts and development of actions required to achieve the mitigation required.
- Consultation with I&APs.
- Incorporation of public comment received during scoping and the draft EIA into the final EIA report.
- Issuing of the final EIA report for review.
- After the draft EIA report was reviewed, comments received are incorporated in the final EIA report and final Environmental Management Programme report (EMPr).

The requirements for the S&EIA process are specifically contained in Chapter 4 Part 3 of the NEMA Reg No 326 (amended on 7 April 2017). The EIA process can take up to 300 days to complete (87 days for scoping phase, 106 days for EIA phase, and 107 days for competent authority to review). In addition, an Integrated Water Use License Application (IWULA) will be submitted to the Department of Water and Sanitation (DWS) in accordance with the National Water Act 1998 (Act No. 36 of 1998) (NWA) for listed water uses. See illustration below;

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## **6. PUBLIC PARTICIPATION PROCESS (PPP)**

### **6.1 OBJECTIVES OF PUBLIC PARTICIPATION**

- Provides Interested and Affected parties (I&APs) with an opportunity to voice their support, concerns and questions regarding the project, application or decision;
- Provides an opportunity for I&APs, EAP and the Competent Authority (CA) to obtain clear, accurate and understandable information about the environmental, social and economic impacts of the proposed activity or implications of a decision;
- Provides I&APs with the opportunity of suggesting ways of reducing or mitigating negative impacts of an activity and for enhancing positive impacts
- Enables the applicant to incorporate the needs, preferences and values of affected parties into the application;

### **6.2 LEGISLATION**

The PPP must comply with the several important sets of legislation that require public participation as part of an application for authorization or approval; namely:

- The Mineral and Petroleum Resources Development Act (Act No. 28 of 2002 - MPRDA);
- The National Environmental Management Act (Act No. 107 of 1998 - NEMA); and
- The National Water Act (NWA, Act No. 36. Of 1998).

Adherence to the requirements of the above-mentioned Acts will allow for an Integrated PPP to be conducted, and in so doing, satisfy the requirement for public participation referenced in the Acts. The details of the Integrated PPP are provided below.

### **6.3 IDENTIFICATION OF I&APS**

An Interested and Affected Parties (I&AP) database will be compiled of key stakeholders and I&AP's identified for notification of the Environmental Authorization Application. The I&AP database includes, amongst others; landowners, communities, regulatory authorities and other specialist interest groups. I&AP's are notified of the proposed project through site notices, public notices and newspaper advertisements. Where contact information is available email notifications has also been sent out.

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#### **6.4 NOTIFICATION AND REGISTER OF I&APS**

The public is invited to review and comment on draft scoping report from the **17<sup>th</sup> of September 2021 – 18<sup>th</sup> of October 2021** where I&AP's are encouraged to send through their concerns or comment and call to **register for a period of 30 days**. The notification procedure includes:

- Newspaper advertisement;
- Site Notices;
- Letters and emails.

#### **6.5 NOTIFICATION OF AVAILABILITY OF SCOPING REPORT AND SCHEDULED MEETING**

With submission of the application to the DMRE, the formal 300 days EIA process has been initiated, as per the NEMA Regulations (2014, as amended). The Draft Scoping Report (DSR) will be available to stakeholders and I&APs for a period of 30 days to review and provide comments. All registered I&APs will be notified via email of the availability of the DSR from **17<sup>th</sup> of September 2021 – 18<sup>th</sup> of October 2021** at the following locations:

	Address
<b>Gerard Sekoto Library</b>	Wanderers Avenue, Middelburg, 1055
<b>Mhluzi public library</b>	11848 Makatane Ave, Mhluzi, Middelburg, 1055

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**APPENDIX A: REGISTRATION AND COMMENT FORM SHEET**

**NOTICE OF SAND MINING RIGHT, ENVIRONMENTAL AUTHORIZATION (INTEGRATED ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT) AND WATER USE LICENSE APPLICATIONS ON PORTION OF PORTION 27 OF THE FARM MIDDELBURG TOWN AND TOWNLANDS 287 JS SITUATED IN THE MIDDELBURG MAGISTERIAL DISTRICT, MPUMALANGA PROVINCE. DMRE REFERENCE NUMBER: MP 30/5/1/2/2/10335 MR**

Please complete this form and return it to **Singo Consulting (Pty) Ltd** to ensure that you are registered as an Interested and Affected Party (I&AP).

By answering the questions below you will help us to develop a better understanding of your information requirements. The form also gives you the opportunity to make comments regarding the project. Additional pages may be attached.

**I&AP Details:**

<b>Full Names and Surname:</b>							
<b>Contact Details:</b>							
<b>Tel(w):</b>		<b>Tel(h):</b>		<b>Fax No:</b>		<b>Cell No:</b>	
<b>Email:</b>							
<b>Physical Address:</b>							
<b>Postal Address:</b>							
<b>Preferred method of communication:</b> <input type="checkbox"/> fax <input type="checkbox"/> e-mail <input type="checkbox"/> post  <b>Preferred telephonic communication:</b> <input type="checkbox"/> cell <input type="checkbox"/> home <input type="checkbox"/> work							
<b>Organization/Representative:</b>							
<b>Farm name, number and subdivision or Street Address (if applicable):</b>							

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**Questions(s):**

**1. Where did you get information about the project?**

**Newspaper advertisement**  **notice board**  **flyer**  **other (please specify)**

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**2. Do you represent a company/organization or is your interest on behalf of yourself?**

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**3. Do you know of anyone that is affected by the proposed activity who was not informed of the project? (Please provide contact details)**

Name:		Organization:	
Contact details			
Address:			
Tel No:	Fax No:	Cell No:	
Email address:			

**Do you have any specific concerns or comments regarding the project?**

YES

NO

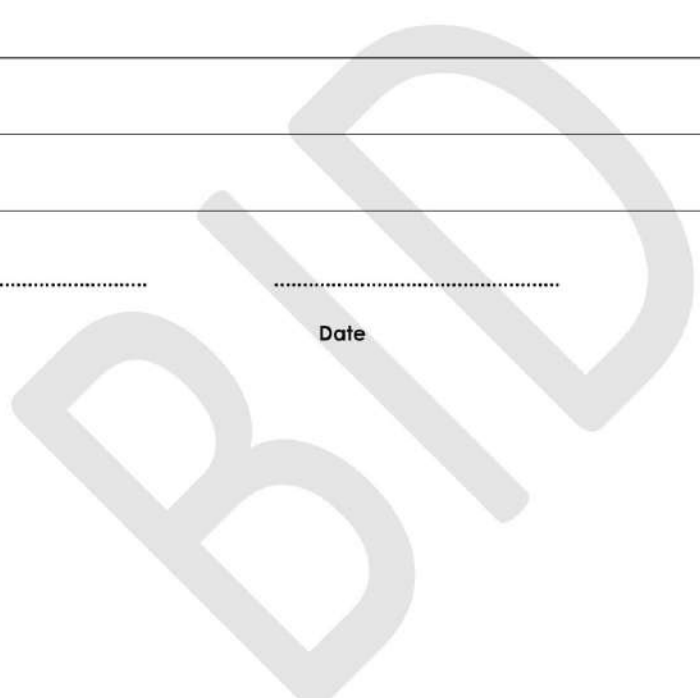


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If yes, please indicate what the comments are?

.....  
**Signed**

.....  
**Date**



4C: Landowner list

## Deeds Office Property

Printed: 2021/09/08 09:40

A LexisNexis® Product

**MIDDELBURG TOWN & TOWNLANDS, 287, 27 (REMAINING EXTENT) (MPUMALANGA)**

**GENERAL INFORMATION**

<b>Date Requested</b>	2021/09/08 09:38
<b>Deeds Office</b>	MPUMALANGA
<b>Information Source</b>	DEEDS OFFICE
<b>Reference</b>	-

\*\* This result is enriched with information from the WinDeed Database.

**PROPERTY INFORMATION**

<b>Property Type</b>	FARM
<b>Farm Name</b>	MIDDELBURG TOWN & TOWNLANDS
<b>Farm Number</b>	287
<b>Portion Number</b>	27 (REMAINING EXTENT)
<b>Local Authority</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>Registration Division</b>	JS
<b>Province</b>	MPUMALANGA
<b>Diagram Deed</b>	G361/1908
<b>Extent**</b>	3802.9134 H
<b>Previous Description</b>	-LG548/969
<b>LPI Code</b>	T0JS00000000028700027

**OWNER INFORMATION**

**Owner 1 of 2**

<b>Type**</b>	-
<b>Name</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>ID / Reg. Number</b>	-
<b>Title Deed</b>	G361/1908
<b>Registration Date</b>	1908/12/04
<b>Purchase Price (R)</b>	SECT 14
<b>Purchase Date</b>	-
<b>Share</b>	-
<b>Microfilm</b>	-
<b>Multiple Properties**</b>	NO
<b>Multiple Owners**</b>	NO

**Owner 2 of 2**

<b>Type**</b>	-
<b>Name</b>	STEVE TSHWETE LOCAL MUNICIPALITY
<b>ID / Reg. Number</b>	-
<b>Title Deed</b>	-
<b>Registration Date</b>	-
<b>Purchase Price (R)</b>	-
<b>Purchase Date</b>	-
<b>Share</b>	-
<b>Microfilm</b>	-
<b>Multiple Properties**</b>	-
<b>Multiple Owners**</b>	-

<b>ENDORSEMENTS (40)</b>				
#	Document	Institution	Amount (R)	Microfilm
1	I-4251/1990LG-27/3/9	0	-	-
2	I-466/2017LG	-	-	-
3	I-5630/977LG-30/9/97	7	-	-
4	I-994/2014C	-	-	-
5	K1043/1975S	-	-	-
6	K139/2011S	-	-	-
7	K1677/1996S	-	-	-
8	K1678/1996S	-	-	-
9	K1679/1996S	-	-	-
10	K1680/1996S	-	-	-
11	K171/2021S	-	-	-
12	K173/1986S	-	-	-
13	K1735/1977S	-	-	-
14	K2522/1988S	-	-	-
15	K3269/1977S	-	-	-
16	K3378/1998S	-	-	-
17	K3407/1987S	-	-	-
18	K3473/2000L	BLACK WATTLE COLLIERY PTY LTD	-	-
19	K343/2015S	-	-	-
20	K3507/2000S	-	-	-
21	K377/2021S	-	-	-
22	K4138/1986PC	-	-	-
23	K4514/2002RM	MIDDELBURG PLAASLIKE MUNISIPALITEIT	-	-
24	K4515/2002L	SIDE MINERALS PTY LTD	-	-
25	K578/1981S	-	-	-
26	K5898/2000S	-	-	-
27	K685/2006S	-	-	-
28	K775/2014S	-	-	-
29	K922/2000L	BLACK WATTLE COLLIERY PTY LTD	-	-
30	K988/2000RM	GEDULD BRICKWORKS & COAL MINING PTY LTD	-	-
31	VA125/2010	STEVE TSHWETE LOCAL MUNICIPALITY	-	-
32	VA1364/2011	STEVE TSHWETE LOCAL MUNICIPALITY	-	-
33	VA244/2011	STEVE TSHWETE LOCAL MUNICIPALITY	-	-
34	CL-MIDDELBURG TC	-	-	-
35	DEVELOPMENT AREA-P8/	87	-	-
36	INFO FROM PRETORIA DEEDS REGIS	5042H	-	-
37	JS.287,27	-	-	-
38	PARTLY-CONTROLLED-AR	EA-P45/81	-	-
39	VORIGE GROOTTE-5536,	4029H	-	-
40	VORIGE GROOTTE-5538,	5042H	-	-

<b>HISTORIC DOCUMENTS (7)</b>				
#	Document	Owner	Amount (R)	Microfilm
1	K1440/1992L	-	-	-
2	K175/2013S	-	-	-
3	G361/1908	MUN MIDDELBURG	-	-
4	G361/1908	MUN MIDDELBURG T14485/1995 0227 END16	END16	-
5	G361/1908	TRANSITIONAL LOCAL COUNCIL FOR MIDDELBURG	END	-
6	G361/1908	MIDDELBURG LOCAL MUNICIPALITY	SECT 14	-
7	G361/1908	STEVE TSHWETE LOCAL MUNICIPALITY	SECT 14	-

\*\* This result is enriched with information from the WinDeed Database.

**DISCLAIMER**  
 This report contains information gathered from our suppliers and we do not make any representations about the accuracy of the data displayed nor do we accept responsibility for inaccurate data. WinDeed will not be liable for any damage caused by reliance on this report. This report is subject to the terms and conditions of the WinDeed End User Licence Agreement (EULA).

4E: Site Notices

**NOTICE OF SAND MINING RIGHT, ENVIRONMENTAL AUTHORIZATION (INTEGRATED ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT) AND WATER USE LICENSE APPLICATIONS ON PORTION OF PORTION 27 OF THE FARM MIDDELBURG TOWN AND TOWNLANDS 287 JS SITUATED IN THE MIDDELBURG MAGISTERIAL DISTRICT, MPUMALANGA PROVINCE.**  
 DMRE REFERENCE NUMBER: MP 30/5/1/2/2/10335 MR

This notice serves to inform all interested and Affected Parties that in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002), National Environmental Management Act (Act No 107 of 1998) as amended in (April 2017) and administered by the Department of Water and Sanitation, that **Top One Construction and General Services** intends to carry out an Environmental Authorization process [Scoping and Full Environmental Impact Assessment Reporting (EIR)] for the extraction of sand on **portion of portion 27 of the farm Middelburg Town And Townlands 287 JS** under the Magisterial District of Middelburg, Mpumalanga Province.

**Location:** The project area covers approximately **300 hectares (ha)** in extent. The project area (in green polygon) is located approximately 3km North-East of Mhluzi, approximately 5.36 km North-West of Middelburg and approximately 13.46km South of Doornkop. The proposed mining area is under the jurisdiction of Steve Tshwete Local Municipality and Nkangala District Municipality in Mpumalanga province.

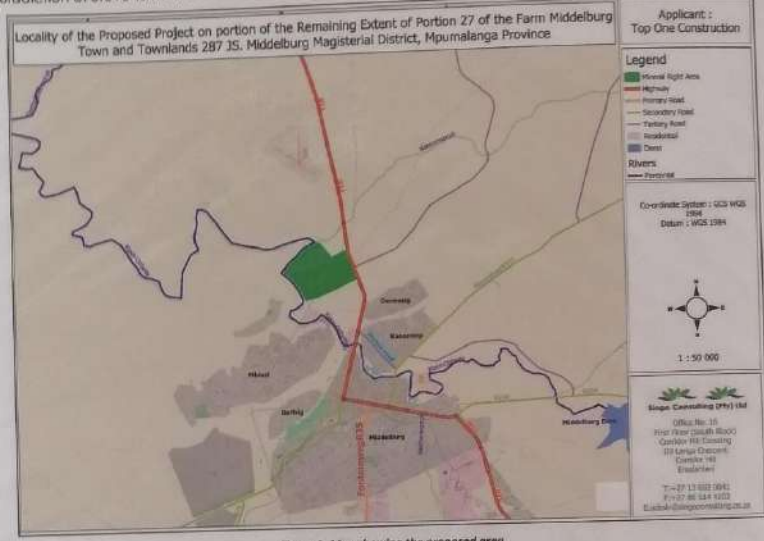


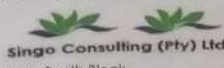
Figure 1: Map showing the proposed area.

The above-mentioned company intends to carry out Environmental Authorization process [Scoping and Full Environmental Impact Assessment Reporting (EIR)] in terms of the National Environmental Management Act (NEMA), Act 107 of 1998, **Singo Consulting (Pty) Ltd** has been appointed as the Independent Environmental Assessment Practitioner (EAP) to complete the necessary environmental applications and oversee the various specialist studies. The following Specialist studies have been identified as integral in this mining right application thus far:

- |                         |                      |                        |               |
|-------------------------|----------------------|------------------------|---------------|
| • Air quality.          | • Biodiversity,      | • Palaeontology,       | • Heritage.   |
| • Hydrological studies. | • Noise.             | • Risk Assessment,     | • Soil study, |
| • Surface water.        | • Traffic management | • Wetland Delineation. |               |

**Public Participation Process and timelines:**  
 Chapter 6, regulation 40(2)(3) of EIA Regulations (GNR 326, 7 April 2017) requires that the Public Participation Process provides access to all information that may have potential to influence decision regarding the applications, it further outlines that the potential interested and Affected Parties be provided with an opportunity to comment on project reports and plans. The Draft Scoping Report will be available from the **17<sup>th</sup> of September 2021 – 18<sup>th</sup> of October 2021** for review at: **Gerard Sekoto Library (Wanderers Avenue, Middelburg, 1055), the Mhluzi public library (11848 Makatane Ave, Mhluzi, Middelburg, 1055)**, substantiated with soft copies upon request from Singo Consulting (Pty) Ltd using the detailed EAP's contact's below, via emails; Dropbox link; Google drive; WeTransfer, etc. All interested and affected parties are welcome to send us their comments with regards to the scoping report review on the contact details below:

**Consultant contact person (EAPs):**



Office 16, First Floor, South Block  
 Corridor Hill Crossing, 09 Langa Crescent, Corridor Hill,  
 eMalahleni

**Senior EAP:** Mr. Kenneth Singo  
 Tell: 013 692 0041  
 Cell: 072 081 6682  
 Email: [kenneth@singoconsulting.co.za](mailto:kenneth@singoconsulting.co.za)  
**Consultant:** Ms Deshney Mapoko  
 Tell: 013 692 0041  
 Cell: 072 116 1225  
 Email: [deshney@singoconsulting.co.za](mailto:deshney@singoconsulting.co.za)

**Applicant contact person(s):**

**TOP ONE CONSTRUCTION AND GENERAL SERVICES**

Cnr Umkumaas & Umlaas  
 Aerorand  
 Middelburg  
 1050

**Contact Person:** Magutle Mokhele Thabo  
 Tell: 083 441 6315/ 076 864 4321  
 Email: [imgutle@gmail.com](mailto:imgutle@gmail.com)

GERARD SEKOTO  
 Public library / Community library  
 Box 14 / area 14  
 Middelburg, 1050



Appendix 5: Site Conditions



