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Proposed Dalyshope Coal Mining Project, Situated in the Magisterial District of Lephalale, Limpopo Province

Final Scoping Report

Prepared for:

Anglo Operations (Pty) Ltd

Project Number:

UCD6170




August 2020



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This document has been prepared by Digby Wells Environmental.

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IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act No. 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 and an Environmental Management Programme report in terms of the National Environmental Management Act (Act No. 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 (EAP) 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.

OBJECTIVE OF THE SCOPING PROCESS

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

- identify the relevant policies and legislation relevant to the activity;
- motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process;
- 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;
- identify the key issues to be addressed in the assessment phase;
- agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken 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; and
- 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

Introduction

Anglo Operations Pty) Ltd (hereafter Anglo or the Applicant) has partnered with Universal Coal Development IV (Pty) Ltd (hereafter Universal) to participate in the proposed Dalyshope Coal Mining Project (the Project) through funding and managing the project development, including the Mining Right application. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resource and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and 30/5/1/1/2/ 10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal.

Universal, on behalf of Anglo, is applying for the following authorisations and licences, which are required prior to the commencement of mining operations:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA);
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);
- Tree Permit in terms of the Constitution of South Africa, 1996 (Act No. 108 of 1996) (Constitution) (Section 24– Environment); National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA); Limpopo Environmental Management Act (Act No. 7 of 2003) (LEMA) Schedule 12 (Protected Plants); and the National Forests Act, 1998 (Act No. 84 of 1998) (NFA).

The Mining Right boundary will include the following farms:

- Buurmanshulp 136 LQ
- Wynberg 215 LQ
- Bergen Op Zoom 188 LQ
- Boompan 237 LQ
- Greenwich 113 LQ (is now Greenrust 708 LQ)
- Breda 147 LQ (Portion now known as Beska 180 LQ)
- Gaylad 208 LQ
- Ecarte 156 LQ
- Rooiboslaagte 144 LQ
- Fairfield 154 LQ (Portion 1, 2 and RE)
- Hilton 190 LQ
- Kromhoek 193 LQ (Portion 1 and RE)
- Stellenbosch 203 LQ
- Lhea 437 LQ (Portion 1, 2 and RE)
- Surrey 18 LQ
- Vucht 436 LQ (Portion 1, 4 and RE)
- Virginia 6 LQ
- Weltevreden 200 LQ (Portion 1 and RE)

- Vryplaats 163 LQ
- Canada 229 LQ (now subdivided into Canada and Matopi 705 LQ)
- Dalyshope 232 LQ (a Portion of Dalyshope 232 was subdivided to form Nazarov 685 LQ)
- Wolvendraai 481 LQ
- Constantia 122 LQ (as subdivided to form a Portion of Fig Tree 716 LQ)
- Klarwater 231 LQ (a Portion of Klarwater 231 was subdivided to form Nazarov 685 LQ)

The Farms Dalyshope 232 LQ and Klarwater 231 LQ are the directly affected farm portions with respect to mining and mining-related activities. The farms are located near the settlement of Steenbokpan within the jurisdiction of Lephalale Local Municipality, situated in the Waterberg District Municipality in the Limpopo Province.

Project Applicant

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Project Overview

The proposed Dalyshope Coal Mining Project is situated within the Waterberg Coalfield of Limpopo Province. Anglo proposes to extract coal from Open Cast Pit 1 (OC1) (409.32 ha) through opencast mining using selective mining techniques. All mining related infrastructure covers a surface area of approximately 47.33 ha (excluding linear infrastructure and OC1).

The proposed infrastructure required includes the following:

- Contractors laydown yard;
- Temporary stockpiles for construction;
- Temporary PCD for construction;
- Opencast 1 ("OC1") pit
- ROM stockpiles;
- Slew product stockpiles;
- Discard facility;
- Topsoil and subsoil stockpiles;
- Overburden (Hards/Softs) stockpiles
- Weighbridges;
- Laboratory;
- Laundry facility
- Water tanks;
- Potable water Pipeline and distribution;
- Dirty water pipeline;
- Sewage Treatment Plant (STP)
- Water Treatment Plant (WTP);
- Brine Pond
- Diesel/wash bay and oil separator;
- Explosives magazine;

- Conveyers belts;
- Workshop;
- Two PCDs;
- Washing plant;
- Crush and Screen plant;
- Offices;
- Change-house;
- Stores;
- Stormwater management infrastructure
- Powerline/s
- Substation
- Rail link and Rail loadout facility
- Brake-test ramp;
- LDV and light vehicle access road;
- Truck access road; and
- Road upgrade (Steenbokpan to site)

Purpose of this Report

A Scoping Report forms part of the Environmental Impact Assessment (EIA) process and aims to identify those biophysical and socio-economic issues or concerns that require investigation as well as determine feasible alternatives. This information is then used to determine the scope of work for the EIA Phase of the EIA process. During the Scoping Phase, people interested or affected by the Project are informed of the Project as well as provided the opportunity to raise issues and concerns. Therefore, the purposes of this Scoping Report are the following:

- To provide a description of the proposed Project and its activities;
- To provide a high-level description of the baseline environment;
- To predict potential impacts as a result of the Project and its activities;
- To provide a detailed plan of study for the EIA Phase; and

To share Project information with Interested and Affected Parties (I&APs) and to record comments and issues raised.

Environmental Consultants

Digby Wells Environmental (Digby Wells) has been appointed by Universal, on behalf of Anglo as the independent Environmental Assessment Practitioner (EAP) to undertake the EIA Process, the Integrated Water Use Licence Application (IWULA) process, associated specialist studies and the required Public Participation Process (PPP) for the proposed Project. The details of the EAP are contained in the table below.

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Approach and Methodology for the Public Participation Process

A PPP as per the EIA Regulations, 2014 (GN R 982 of 4 December 2014 as amended by GN R 326 of 7 April 2017) (EIA Regulations, 2014), as amended, promulgated under the NEMA, has been initiated. The PPP is central to the investigation of environmental and social impacts, as any stakeholder who is affected by the Project is given an opportunity to comment, raise concerns and contribute to ensure that local knowledge, needs and values are understood and taken into consideration as part of the EIA process.

As part of planning for face to face stakeholder consultations, Digby Wells submitted a Stakeholder Engagement Plan (SEP) as per the Covid-19 Regulations (GN R 650 of 5 June 2020) of the DMRE. It should be noted that the Plan was approved by the DMRE prior to the commencement of the public participation activities.

Subsequently, Digby Wells undertook the PPP in accordance with the regulated 30-day comment period. The Draft Scoping Report was made available for public comment for a period of 30 days and all comments or concerns raised were recorded and responded to in the Comments and Responses Report (CRR). The 30-day comment period was from 24 June 2020 to 24 July 2020.

The following activities were undertaken to announce the Project and initiate the Scoping Phase:

- A Background Information Document (BID) was distributed via email on **20 April 2020 and 24 June 2020**;
- Newspaper advertisement was placed in the Mogol Post after the National lock down period to announce the extended consultation period;
- An announcement letter including a registration form was distributed to identified I&APs via email on **20 April 2020 and 24 June 2020**;
- Site notices were placed around the site on **25 February 2020**; and
- An electronic copy of the Draft Scoping Report could be accessed and downloaded from the Digby Wells website www.digbywells.com (Public Documents) and our data-free service portal. Due to COVID-19 Regulations, no hard copies were made available.

Project Alternatives

The alternatives considered in this report and during the pre-feasibility studies undertaken include the design and layout of the mine, mining method, water supply, electricity supply, transportation of coal, and the “No-Go” alternative.

Conclusions and Recommendations

Based on the findings of the Scoping Phase, the proposed Project does not present any fatal flaws in terms of negative impacts to the environment. The significance of impacts identified



during the preliminary assessment of the baseline environment can be greatly reduced with the implementation of mitigation and management measures.

There are, however, several anticipated impacts that will require a more detailed investigation and assessment. Digby Wells will assess these impacts in more detail during the EIA Phase and present the findings in the EIA Report. Mitigation and management measures will also be identified during this Phase.

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LIST OF PLANS

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Plan 2: Regional Setting

Plan 3: Locality Map

Plan 4: Infrastructure Layout Plan

Plan 5: Detailed Layout of Mining-Related Infrastructure

LIST OF ABBREVIATIONS

Anglo	Anglo Operations (Pty) Ltd
AMD	Acid Mine Drainage
ASTM	American Standard Test Method
CBA'S	Critical Biodiversity Areas
CEC	Cation Exchange Capacity
CRR	Comments and Response Report
dBA	Decibels
DEA	Department of Environmental Affairs
Digby Wells	Digby Wells Environmental
DMRE	Department of Mineral Resources and Energy
DWS	Department of Water and Sanitation (previously DWA)
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EN	Endangered



ESA's	Ecological Support Areas
GDP	Gross Domestic Product
Ha	hectares
HGM	Hydro geomorphic Unit
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
IUCN	International Union for the Conservation of Nature
IWUL	Integrated Water Use Licence
IWULA	Integrated Water Use Licence Application
LC	Least Concern
LLM	Lephalale Local Municipality
LoM	Life of Mine
MAE	Mean Annual Evaporation
Mamsl	Metres Above Mean Sea Level
MAP	Mean Annual Precipitation
MAR	Mean Annual Runoff
MPRDA	Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)
NBA	National Biodiversity Assessment
NDCR	National Dust Control Regulations
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM: AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM: BA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEM: WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NFEPA	National Freshwater Ecosystem Priority Area
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NT	Near Threatened
NWA	National Water Act, 1998 (Act No. 36 of 1998)
PCD	Pollution Control Dam
PES	Present Ecological Status
PPP	Public Participation Process
QDS	Quarter Degree Square

ROM	Run of Mine
SADC	Southern Africa Development Community
SAHRA	South African Heritage Resources Agency
SAIAB	South African Institute of Aquatic Biodiversity
SANAS	South African National Accreditation System
SANParks	South African National Parks
SANS	South African National Standards
SEP	Stakeholder Engagement Plan
SSC	Species of Special Concern
Universal	Universal Coal Development IV (Pty) Ltd
USEPA	United States Environmental Protection Agency
VU	Vulnerable
WDM	Waterberg District Municipality
WMA	Water Management Area

1 Introduction

Universal has appointed Digby Wells Environmental (hereinafter Digby Wells) as the Environmental Assessment Practitioner (EAP) to undertake environmental authorisations required for the proposed Dalyshope Coal Mining Project. The development of Dalyshope Coal Mining Project Anglo. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resources and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and LP 30/5/1/2/2/10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal on an area of 4957.7 hectares (ha). The Prospecting Rights cover numerous farm portions, the boundaries of which have since been realigned and renamed.

The proposed Mining Right boundary will include the following farms, as captured in the Prospecting Rights:

- Buurmanshulp 136 LQ
- Wynberg 215 LQ
- Bergen Op Zoom 188 LQ
- Boompan 237 LQ
- Greenwich 113 LQ (is now Greenrust 708 LQ)
- Breda 147 LQ (Portion now known as Beska 180 LQ)
- Gaylad 208 LQ
- Ecarte 156 LQ
- Rooiboslaagte 144 LQ
- Fairfield 154 LQ (Portion 1, 2 and RE)
- Hilton 190 LQ
- Kromhoek 193 LQ (Portion 1 and RE)
- Stellenbosch 203 LQ
- Lhea 437 LQ (Portion 1, 2 and RE)
- Surrey 18 LQ
- Vucht 436 LQ (Portion 1, 4 and RE)
- Virginia 6 LQ
- Weltevreden 200 LQ (Portion 1 and RE)
- Vryplaats 163 LQ
- Wolvendraai 481 LQ
- Canada 229 LQ (now subdivided into Canada and Matopi 705 LQ)
- Constantia 122 LQ (as subdivided to form a Portion of Fig Tree 716 LQ)
- Dalyshope 232 LQ (a Portion of Dalyshope 232 was subdivided to form Nazarov 685 LQ)
- Klaarwater 231 LQ (a Portion of Klaarwater 231 was subdivided to form Nazarov 685 LQ)

Anglo proposes to develop a coal mine and the proposed mining activities will take place on the Farms Dalyshope 232 LQ and Klaarwater 231 LQ. The Environmental Authorisation application will therefore focus on these two properties only for this phase of the project.

This application considers the establishment of a contractor operated truck and shovel opencast mine, producing approximately 2.4 million tonnes per annum (Mtpa) of thermal coal product for approximately five years. After five years, the mine will ramp up production

to approximately 12 Mtpa of product for approximately 25 years from a single open pit, giving a total Life of Mine (LoM) of approximately 30 years. The application process will include:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA); and
- An Integrated Water Use Licence Application (IWULA) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA).
- Tree Permit in terms the Constitution of South Africa, 1996 (Act No. 108 of 1996) (Constitution) (Section 24– Environment); National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA); Limpopo Environmental Management Act (Act No. 7 of 2003) (LEMA) Schedule 12 (Protected Plants); and the National Forests Act, 1998 (Act No. 84 of 1998) (NFA).

This Scoping Report has been compiled in support of both the NEMA and NEM: WA applications and will also form basis for the EIA, the MRA and the Environmental Management Programme (EMP).

2 Project Applicant

This section provides the details of the Project Applicant as well as the EAP.

2.1 Details of the applicant

Table 2-1 provides the contact details of the applicant.

Table 2-1: Contact Details of the Applicant

Name of Applicant:	Anglo Operations Proprietary Limited		
Registration number (if any):	1921/006730/07		
Trading name (if any):	N/A		
Responsible Person : (E.g. CEO, Director, etc.)	Mineral and Property Rights Department		
Contact person:	Leonore van Wyk		
Physical address:	55 Marshall Street, Johannesburg, 2107, South Africa		
Postal address:	PO Box 61587 Marshalltown Johannesburg, South Africa		
Postal code:	2107		
Telephone:	+27 (0)11 638 3596	Fax:	-

	+27 (0)76 822 0399		
Email:	Leonore.vanwyk@angloamerican.com		

2.2 Item 2(a)(i): Details of EAP

Digby Wells has been appointed by Universal, on behalf of Anglo, to undertake the environmental-legal applications in support of the proposed Project.

Table 2-2: Contact details of the EAP

Company name:	Digby Wells and Associates (South Africa) (Pty) Ltd
Contact person:	Xan Taylor
Physical address:	Digby Wells House, 48 Grosvenor Road, Bryanston, Johannesburg, 2191
Telephone:	011 789 9495
Email:	Xan.Taylor@digbywells.com

2.2.1 Item 2(a)(ii): Expertise of the EAP

This section provides the qualifications and experience of the EAP for the proposed Project. The EAPs Curriculum Vitae and Degrees are attached in Appendix A.

2.2.1.1 Qualifications of the EAP

Ms Xan Taylor holds the following degrees/diplomas:

- BA Honours Environmental Management – University of South Africa (2013)
- BA English and Psychology – University of South Africa (2009)

2.2.1.2 EAP Experience

Xan Taylor started working as a Consultant in 2012 and joined Digby Wells in 2015. She has eight years' experience. The majority of Xan's experience pertains to the mining sector applying for applications governed by the NEMA for both the 2010 and 2014 Regulations thereunder, the MPRDA, the NWA, as well as international legislation; International Finance Corporation Performance Standards and World Bank Guidelines. Her experience comprises managing integrated mining applications: compiling application forms, Basic Assessment reports, Scoping reports, Environmental Impact Assessment reports, Environmental Management Programmes, international Environmental and Social Impact Assessments, NEMA Regulation 29 and Regulation 31 Amendment reports, Section 102 Amendment reports, exemption applications, Appeal processes, and auditing.

3 Item 2(b): Description of the property

The Dalyshope Coal Mining Project is situated approximately 30 km north of Steenbokpan and approximately 60 km west of Lephalale in the jurisdiction of Lephalale Local Municipality (LLM), which is situated in the Waterberg District Municipality (Limpopo Province, South

Africa). Table 3-1 provides a summary of the properties that are directly affected by the proposed Project. The western portion of the proposed Project area will be mined and will accommodate the mining-related infrastructure (refer to Figure 4-3 and Figure 4-4). The proposed open cast pit (henceforth known as OC1) is located on the farm Dalyshope 232 LQ and forms the main focus area of the report together with the proposed infrastructure located on a small section of Dalyshope 232 LQ and Klaarwater 231 LQ. The approximate centre point coordinates of the proposed open cast pit are 23°34'11.17"S and 27°14'6.27"E.

Refer to Figure 3-1 for the Land Tenure Map (also attached in Appendix B).

Table 3-1: Property Description

Farm Name:	Mining and mining-related activities: <ul style="list-style-type: none"> • Klaarwater 231 LQ; • Dalyshope 232 LQ;
Application Area (Ha):	The Project area covers an area of approximately 4957.7 ha.
Magisterial District:	The proposed Dalyshope Coal Mining Project falls under the Lephalale Magisterial District.
Distance and direction from nearest town:	The nearest major town is Lephalale situated approximately 50 km southeast of the Project area.
21-digit Surveyor General Code for each farm portion:	T0LQ00000000023100000 T0LQ00000000023200000

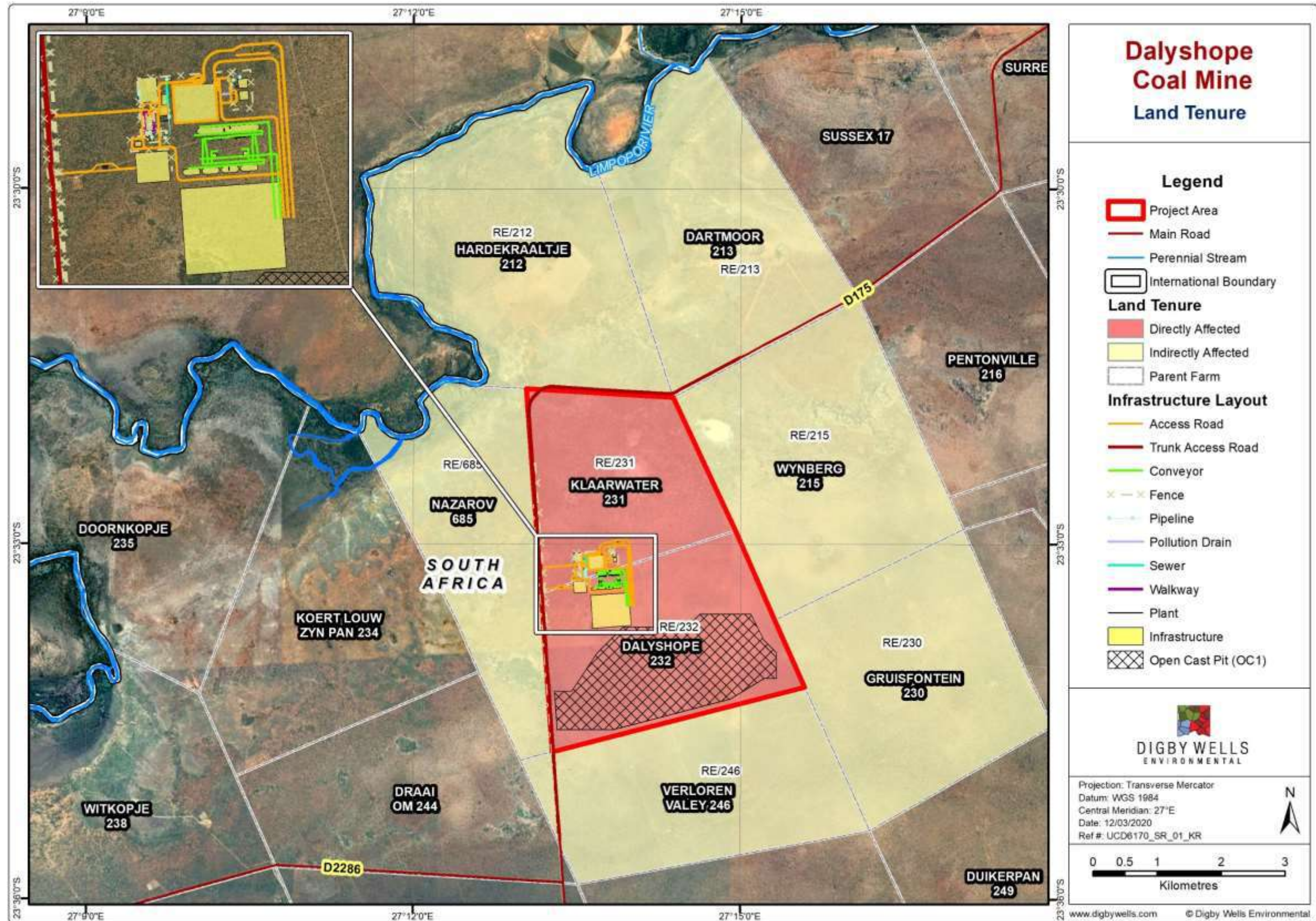


Figure 3-1: Land Tenure Map

4 Item 2(c): Locality map

Figure 4-1 illustrates the regional setting of the Project area. The plan is also attached in Appendix B.

The Project site extends to the South African and Botswana border (refer to Figure 4-2 for the locality map), however, mining activities will take place approximately 3 km as estimated from the nearest point of the border. It is situated near the town of Lephalale within the Lephalale Local Municipality (LLM), located in the north-western part of Waterberg District, Limpopo Province. The nearest settlement, as measured from the location of the mining activities, is Steenbokpan situated approximately 20 km south-south-east of the Project area.

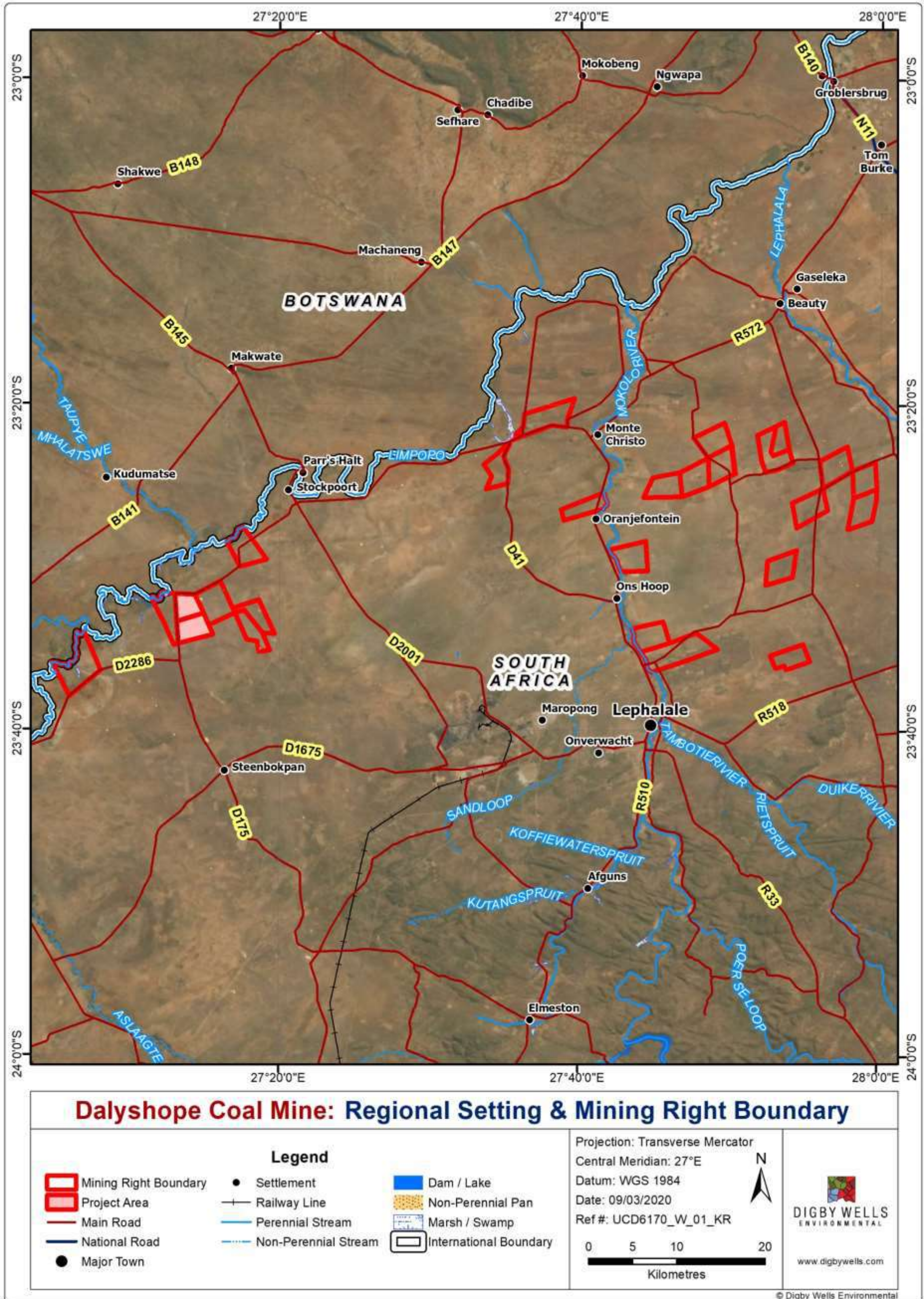


Figure 4-1: Regional Setting and Full Extent of Mining Right Boundary

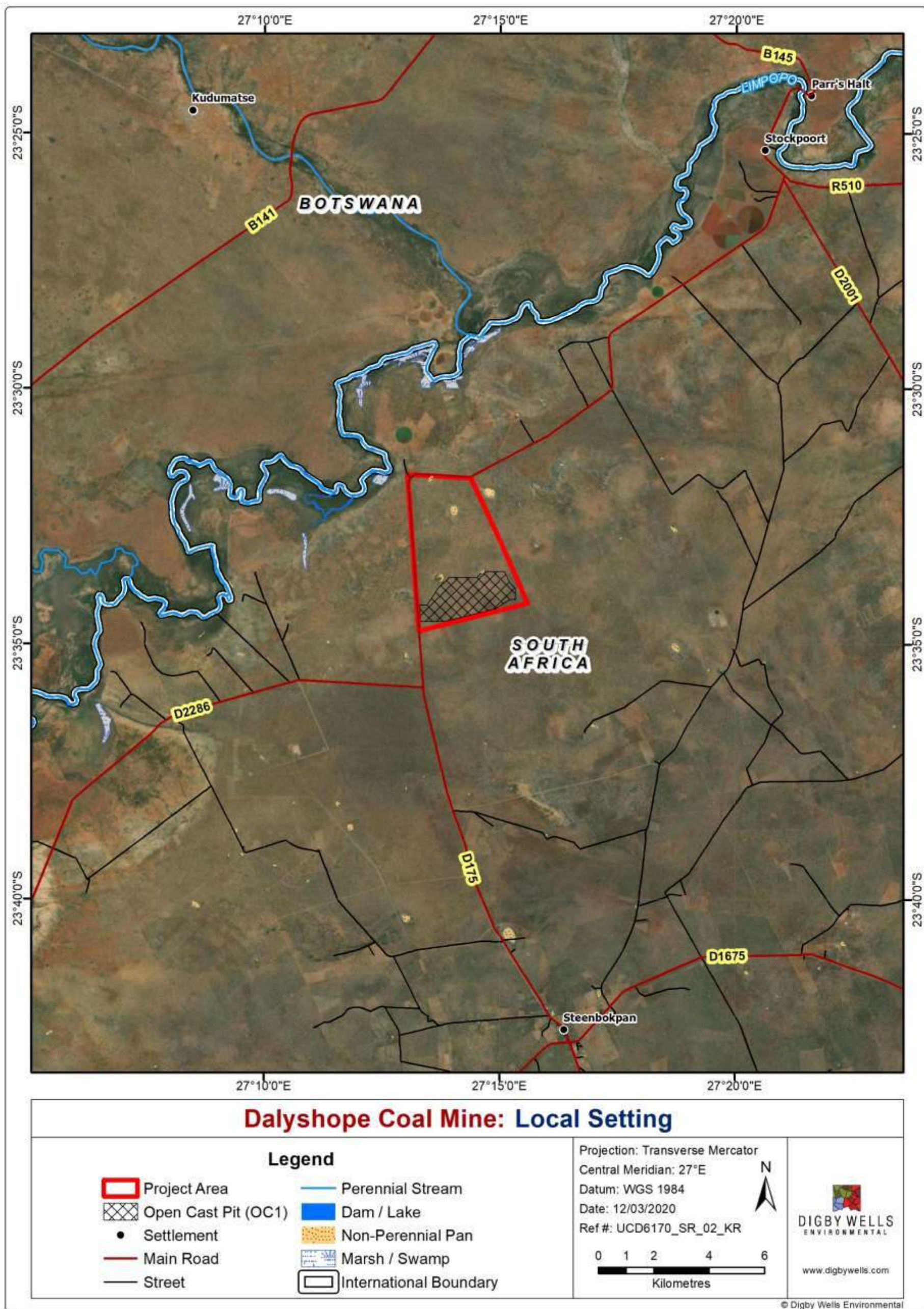


Figure 4-2: Locality Map

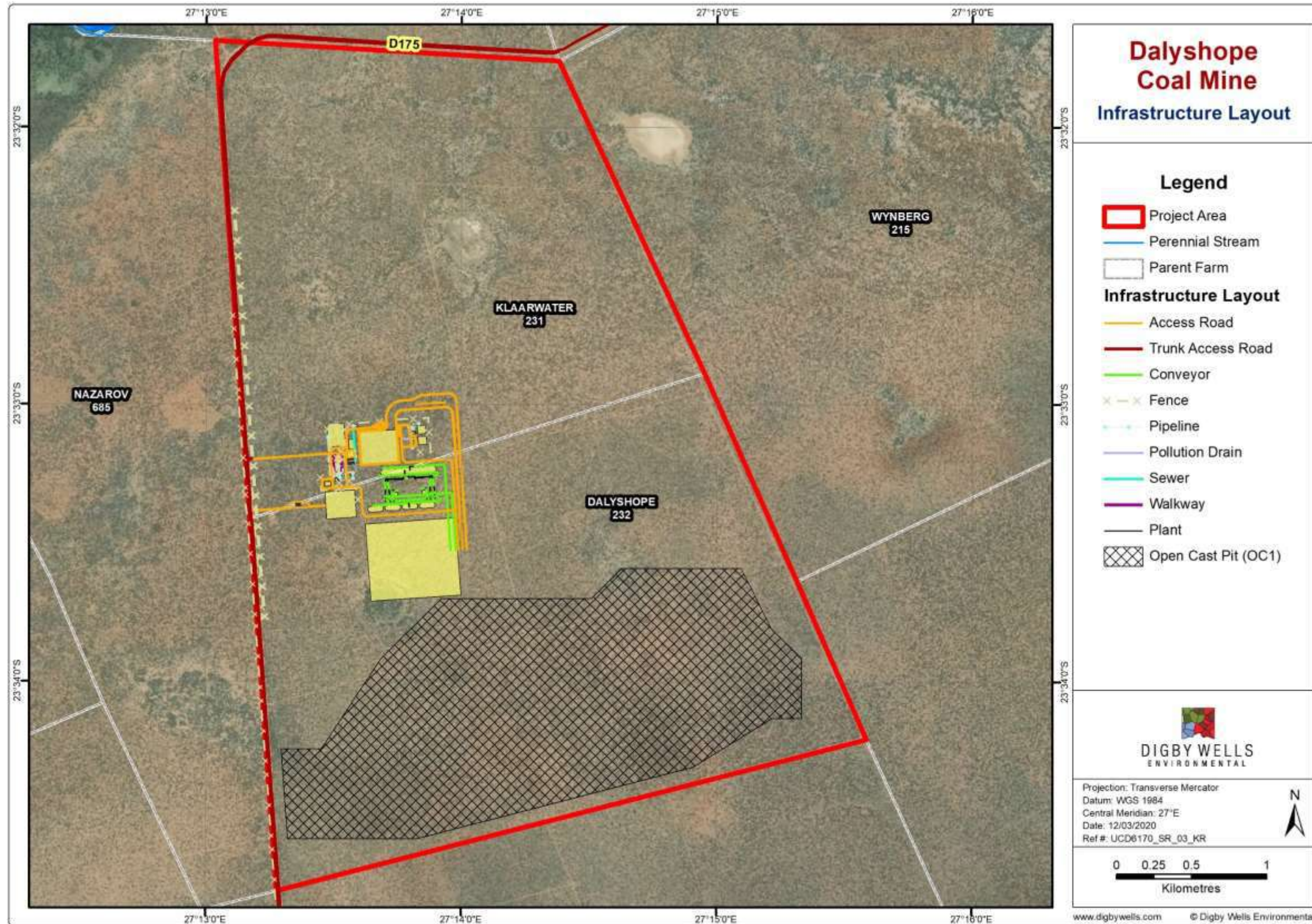


Figure 4-3: Preliminary Infrastructure Layout Plan

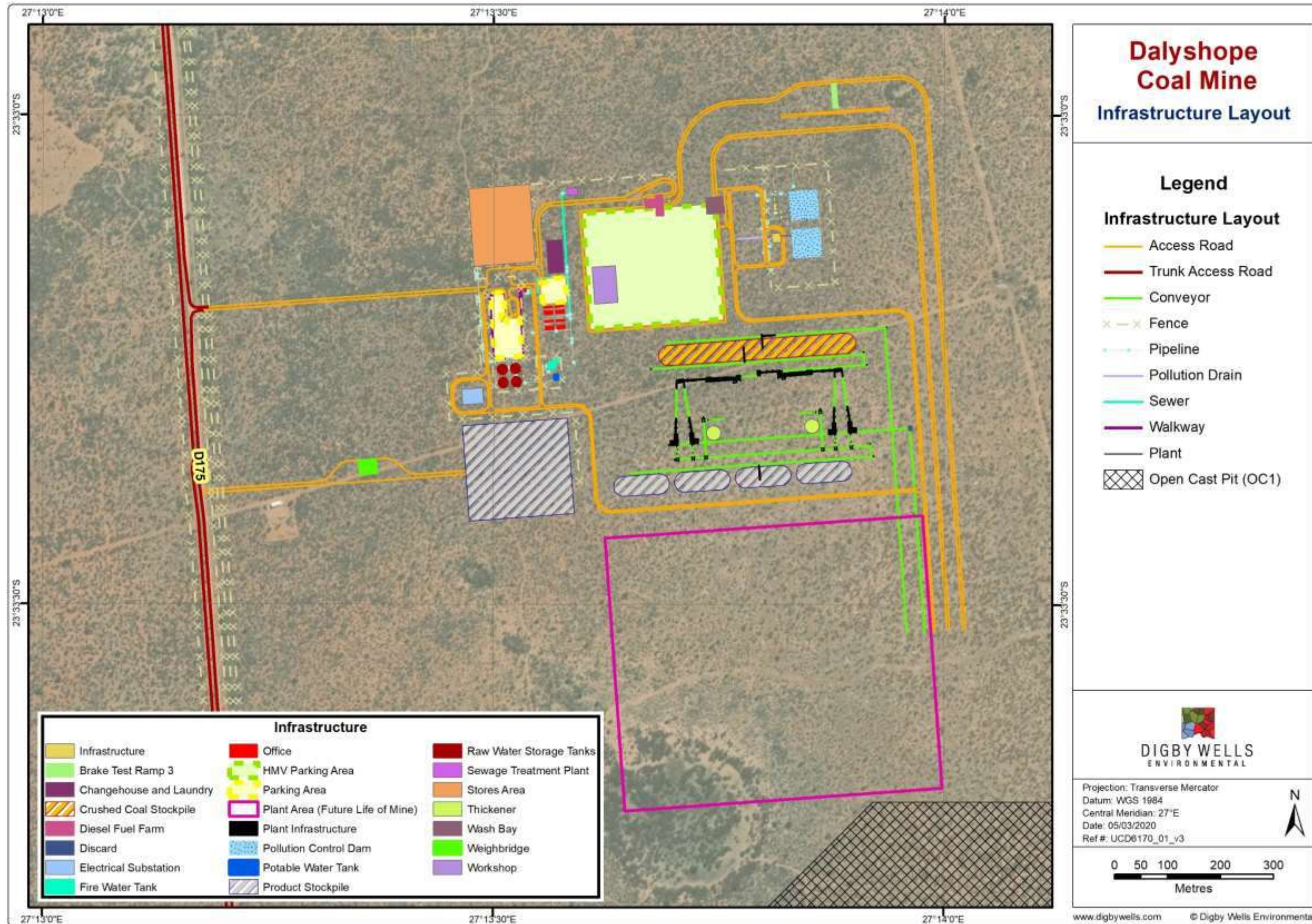


Figure 4-4: Detailed Layout of Mining-Related Infrastructure

5 Item 2(d): Description of the scope of the proposed overall activity

The proposed infrastructure layout plans, as shown in Figure 4-3 and Figure 4-4 above, are included in Appendix B.

For the purpose of the report, the following terms apply:

- **Mining Right area** defines the farms included in the Mining Right boundary;
- **Project area** defines farm portions directly affected by mining and mining-related infrastructure i.e. Dalyshope and Klaarwater; and
- **Study Area** will be determined by each specialist and the zone of influence in terms of potential impact the Project Area will have, relevant to the individual specialist fields.

5.1 Item 2(d)(i): Listed and specified activities

This section details the proposed Project activities to be undertaken on site, as well as the Listed Activities in terms of the NEMA EIA Regulations, 2014 (as amended). Table 5-1 details the Project activities per phase (Construction, Operational and Decommissioning Phases). Table 5-2 provides the identified Listed Activities as provided by the EIA Regulation, 2014 (as amended). As indicated in Table 5-2 below, Regulations GN R.983, GN R.984 and GN R.921 will be triggered, and therefore a Scoping and EIA process must be undertaken, and approval received prior to the activities being commenced with.

Table 5-1: Proposed Project Activities

Project Phase	Project Activity
Construction Phase	Site/vegetation clearance
	Temporary PCD
	Contractors laydown yard
	Access and haul road construction
	Infrastructure construction
	Diesel storage and explosives magazine
	Topsoil stockpiling
Operational Phase	Open pit establishment
	Removal of rock (blasting)
	Stockpiling (rock dumps, soft dumps, soils, ROM, product, discard dump) establishment and operation
	Diesel storage and explosives magazine
	Operation of the open pit workings

Project Phase	Project Activity
	Operating crush and screen and coal washing plant
	Operating sewage treatment plant and water treatment plant
	<p>Water use and storage on-site – during the operation water will be required for various domestic and industrial uses. Water Management infrastructure including Two Pollution Control Dams (PCDs) will be constructed that capture water from the mining area, which will be stored and used accordingly.</p> <p>Workshop and storage of chemicals; Laundry and Laboratory services; Backfilling and concurrent rehabilitation; Weighing of coal trucks; Coal transportation through trucking, rail and conveyer belts; Washing of mine vehicles; and Fuelling of diesel on site.</p>
	Storage, handling and treatment of hazardous products (including fuel, explosives and oil) and waste
	Maintenance activities – through the operations maintenance will need to be undertaken to ensure that all infrastructure is operating optimally and does not pose a threat to human or environmental health. Maintenance will include haul roads, crushing and washing plant, machinery, water and stormwater management infrastructure, stockpile areas, dumps, etc.
	Decommissioning Phase
Rehabilitation – rehabilitation mainly consists of spreading of the preserved subsoil and topsoil, profiling of the land and re-vegetation	
Post-closure monitoring and rehabilitation	

Table 5-2: Listed and Specified Activities

Name of Activity	Aerial extent of the activity	Listed Activity	Applicable Listing Notice	Waste Management Authorisation
All infrastructure including, change houses, offices, ablutions, laundry facility, workshops, Fencing and Laboratory	47.33 ha (excludes linear infrastructure and OC1)	<i>Not listed</i>	-	-
Blasting	OC 1 – 410 ha	<i>Not listed</i>	-	-
Weighbridges and access control office	Less than 1 ha	<i>Not listed</i>	-	-
Topsoil and Subsoil stockpiles	<i>Not yet available</i>	<i>Not listed</i>	-	-
Potable water pipeline	Approximately 30 m	<i>Not listed</i>	-	-
Process water from STP	Approximately 30 m	<i>Not listed</i>	-	-
Stormwater infrastructure	<i>To be designed during the EIA Phase</i>	X – 9	GN R 983, Listing Notice 1	-
STP pipelines	Approximately 160m	X – 10	GN R 983, Listing Notice 1	-
Substation and powerlines	Less than 1 ha	X – 1 and X – 11(i)	GN R 983, Listing Notice 1	-
Plant area and OC1 (within 32m of a watercourse)	440 ha	X – 12	GN R 983, Listing Notice 1	-
Diesel bay	Less than 1 ha	X – 14	GN R 983, Listing Notice 1	-
Explosives magazine	Less than 1 ha	X – 14	GN R 983, Listing Notice 1	-
Haul roads (on site)	8 km	X - 24 (ii)	GN R 983, Listing Notice 1	-

Name of Activity	Aerial extent of the activity	Listed Activity	Applicable Listing Notice	Waste Management Authorisation
Access road into the Mine & Upgrade of Steenbokpan road	20 km	X – 24 (ii)	GN R 983, Listing Notice 1	-
Two PCDs	0.6 ha	X – 13	GN R 983, Listing Notice 1	-
Storage water tank	Less than 1 ha	X – 13	GN R 983, Listing Notice 1	-
Power line construction	<i>Not yet available</i>	X- 11	GN R 983, Listing Notice 1	-
WTP	<i>Not yet available</i>	X – 16	GN R 983, Listing Notice 1	-
STP	0.03 ha	X – 25	GN R 983, Listing Notice 1	-
Infrastructure requiring WUL (OC1, PCDs, wash plant, WTP, brine pond, WRD)	Approximately 500ha	X – 6	GN R 984, Listing Notice 2	-
Rail	<i>Not yet available</i>	X – 12	GN R 984, Listing Notice 2	-
Site/vegetation clearance (Protected tree species)	525.37 ha	X – 30 X – 15	GN R 983, Listing Notice 1 GN R 984, Listing Notice 2	-
Conveyor belt	Discard to pit – 390m Conveyor from pit – 580m Plant conveyors – 3417m <i>Throughput to be confirmed</i>	X – 7 (iii)	GN R 984, Listing Notice 2	-
OC1 with related infrastructure Washing plant area	525.37 ha Approximately 30 ha	X – 17	GN R 984, Listing Notice 2	-

Name of Activity	Aerial extent of the activity	Listed Activity	Applicable Listing Notice	Waste Management Authorisation
Product and ROM stockpile with tip Crushing and Screening	Approximately 6 ha	X – 17	GN R 984, Listing Notice 2	-
Internal access road within CBA1	2 km	X – 4 e.i.(ee) and 4 e.i.(gg)	GN R 985, Listing Notice 3	-
Diesel bay	Less than 1ha	X – 10 e.i.	GN R 985, Listing Notice 3	-
Vegetation clearance	525.37 ha	X – 12 e.ii	GN R 985, Listing Notice 3	-
Road upgrade	20km	X – 18 e.(ee) and e.i.(gg)	GN R 985, Listing Notice 3	-
Hard /Softs and/ or Rock dump	<i>Not yet available</i>	Category A: X – 10, X – 11 and X – 12	GN R 921 under NEM: WA	Required
Residue storage (Discard facility) Processing plant	80m ² Approximately 30 ha	Category B: X – 1 and 11	GN R 921 under NEM: WA	Required

5.2 Description of the activities to be undertaken

5.2.1 Mineral Deposit and Resource Reserve

The applicant intends to develop a coal mine in the Waterberg area on the farms Klaarwater 231 LQ and Dalyshope 232 LQ. The quantity of coal to be extracted from the proposed pit is approximately 2.4 million tonnes per annum (Mtpa) of thermal coal product for approximately five years. After five years, the mine will ramp up production to approximately 12 Mtpa of product for approximately 25 years from a single open pit (OC1), giving a total LoM of approximately 30 years. The coal product will be sold to various markets.

5.2.2 Mining

Opencast strip mining using selective mining techniques is proposed for extracting the resource. The mine will be accessed via a boxcut and ramp arrangement located in the north-eastern corner of the farm Dalyshope. Overburden material will be hauled to spoil until such time as sufficient void has been created within the pit to allow for in-pit tipping. Selective mining of the coal seams is not required due to the specification of the product required but selective mining of the partings will be conducted.

ROM coal from the pit will be crushed in a primary crusher at the pit head. The crushed coal will be transported by conveyor belt from the pit head to stockpiles before the washing plant. Coal will be removed from the stockpile and fed into the plant. The coal will be screened to remove -50mm coal. The oversize coal will be crushed in a secondary crusher before re-joining the -50mm coal. The -50mm coal is fed into the cyclone plant whereby it will be washed at a density of 1.80 to produce product and discard. The washing plant will be in modular format, with two modules each capable of a throughput of 1 000 tons per hour.

The discard will be taken by conveyor belt back to the pit head where it will be loaded into trucks to be deposited back into the bottom of the pit.

The product will be placed on stockpiles before being transported to market. The product will either be transported by road haulers on the district/provincial road or by means of a rail line, should the latter prove economically viable.

5.2.3 Infrastructure associated with the mine

The main infrastructure (Refer to Figure 4-4 above) associated with the mine includes, but is not limited to:

- Contractors laydown yard;
- Temporary stockpiles for construction;
- Temporary PCD for construction;
- Opencast 1 ("OC1") pit
- ROM stockpiles;
- Laboratory;
- Laundry facility
- Water tanks;
- Potable water Pipeline and distribution;
- Dirty water pipeline;



-
- Slew product stockpiles;
 - Discard facility;
 - Topsoil and subsoil stockpiles;
 - Overburden (Hards/Softs) stockpiles
 - Weighbridges;
 - Conveyers belts;
 - Workshop;
 - Two PCDs;
 - Washing plant;
 - Crush and Screen plant;
 - Offices;
 - Change-house;
 - Stores;
 - Sewage Treatment Plant
 - Water Treatment Plant;
 - Brine Pond
 - Diesel/wash bay and oil separator;
 - Explosives magazine;
 - Stormwater management infrastructure
 - Powerline/s
 - Substation
 - Rail link and Rail loadout facility
 - Brake-test ramp;
 - LDV and light vehicle access road;
 - Truck access road; and
 - Road upgrade (Steenbokpan to site)

6 Item 2(e): Policy and legislative context

From an environmental and social perspective, the proposed Project is required to comply with all the obligations in terms of the provisions of the NEMA and MPRDA. The additional legislative guidelines directing the project are outlined in further detail in Table 6-1 below.

Table 6-1: Policy and Legislative Context

Applicable legislation and guidelines used to compile the report	Reference where applied
<p><u>The Constitution of the Republic of South Africa, 1996</u></p> <p>Under Section 24 of the Constitution of the Republic of South Africa, 1996 (the Constitution) it is clearly stated that:</p> <p><i>Everyone has the right to</i></p> <p><i>(a) an environment that is not harmful to their health or well-being; and</i></p> <p><i>(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -</i></p> <p><i>(i) Prevent pollution and ecological degradation;</i></p> <p><i>(ii) Promote conservation; and</i></p> <p><i>(iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.</i></p>	<p>Digby Wells is undertaking an EIA process to identify and determine the potential impacts associated with the Project. Mitigation measures recommended will aim to ensure that the potential impacts are managed to acceptable levels to support the rights as enshrined in the Constitution.</p>
<p><u>National Environmental Management Act, 1998 (Act No. 107 of 1998) and EIA Regulations, 2014 (as amended)</u></p> <p>The Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA), as amended was set in place in accordance with Section 24 of the Constitution. Certain environmental principles under NEMA have to be adhered to, to inform decision making for issues affecting the environment.</p> <p>Section 24 (1)(a) and (b) of NEMA state that:</p> <p><i>The potential impact on the environment and socio-economic conditions of activities that</i></p>	<p>Activities associated with the proposed mine are identified as Listed Activities in the Listing Notices (as amended) and therefore require environmental authorisation prior to being undertaken. This Scoping Report and proceeding EIA Report will be informed by the requirements of the NEMA and Regulations thereunder.</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<p><i>require authorisation or permission by law and which may significantly affect the environment, must be considered, investigated and assessed prior to their implementation and reported to the organ of state charged by law with authorizing, permitting, or otherwise allowing the implementation of an activity.</i></p> <p>The EIA Regulation, 2014 was published under GN R 982 on 4 December 2014 (EIA Regulations) and came into operation on 08 December 2014. Together with the EIA Regulations, the Minister also published GN R 983 (Listing Notice No. 1), GN 984 (Listing Notice No. 2) and GN R 985 (Listing Notice No. 3) in terms of Sections 24(2) and 24D of the NEMA, as amended. The EIA Regulations have been made applicable to prospecting and mining activities.</p>	
<p><u>Mineral and Petroleum Resource Development Act, 2002 (Act No. 28 of 2002) (MPRDA)</u></p> <p>The MPRDA sets out the requirements relating to the development of the nation's mineral and petroleum resources. It also aims to ensure the promotion of economic and social development through exploration and mining related activities. The MPRDA requires that mining companies assess the socio-economic impacts of their activities from start to closure and beyond. Companies must develop and implement a comprehensive Social and Labour Plan (SLP) to promote socio-economic development in their host communities and to prevent or lessen negative social impacts.</p>	<p>Anglo is the applicant and holder of two Prospecting Rights.</p> <p>Anglo is applying for a Mining Right to mine coal on the Farms Dalyshope 232 LQ and Klaarwater 231 LQ.</p> <p>The EIA process will be undertaken to meet the requirements of the MPRDA read with the EIA Regulations, 2014 (as amended). Financial Provisioning and Closure Costs will be included in the EIA.</p>
<p><u>National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)</u></p> <p>On 29 November 2013, the list of waste management activities published under GN R718 of 3 July 2009 (GN R718) was repealed and replaced with a new list of waste management activities under GN R921 of 29 November 2013. Included in the new list are activities listed under Category A, B and C. These activities include inter alia the following:</p> <p><u>Category A</u> describes waste management activities requiring a Basic Assessment process to be carried out in accordance with the EIA Regulations supporting an application for a waste</p>	<p>A WML has been applied for due to the nature of mining activities.</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<p>management licence;</p> <p><u>Category B</u> describes waste management activities requiring an Environmental Impact Assessment process to be conducted in accordance with the EIA Regulations supporting a waste management licence application; and</p> <p><u>Category C</u> describes waste management activities that do not require a WML, but these activities will have to comply with the prescribed requirements and standards as prescribed by the Minister, which includes the Norms and Standards for Storage of Waste, 2013. These activities include the storage of general waste at a facility with a capacity to store in excess of 100 m³ and storage of hazardous waste in excess of 80 m³.</p> <p>The Waste Classification and Management Regulations published under GN R 634 of November 2013 require that all wastes be classified according to SANS10234 and managed according to its classification.</p>	
<p><u>National Water Act, 1998 (Act No. 36 of 1998) (NWA)</u></p> <p>The NWA provides for the sustainable and equitable use and protection of water resources. It is founded on the principle that the National Government has overall responsibility for and authority over water resource management, including the equitable allocation and beneficial use of water in the public interest, and that a person can only be entitled to use water if the use is permissible under the NWA.</p> <p>GN R 704 was published in June 1999 and aims to regulate the use of water for mining and related activities for the protection of water resources and states the following:</p> <ul style="list-style-type: none"> • Regulation 4: No residue deposit, reservoir or dam may be located within the 1:100-year flood line, or less than a horizontal distance of 100 m from the nearest watercourse. Furthermore, person(s) may not dispose of any substance that may cause water pollution; • Regulation 5: No person(s) may use substances for the construction of a dam or impoundment if that substance will cause water pollution; 	<p>An IWULA and an associated Integrated Water and Waste Management Plan (IWWMP) are required in terms of Section 21 of the NWA for the Project. The IWULA and IWWMP will be compiled and submitted to the DWS as the decision-making authority.</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<ul style="list-style-type: none"> Regulation 6 is concerned with the capacity requirements of clean and dirty water systems, and Regulation 7 details the requirements necessary for the protection of water resources. 	
<p><u>DWS¹ Best Practice Guideline – G1: Storm Water Management Plan (SWMP)</u></p> <p>These are guidelines provided by the DWS for the development of a SWMP. The following will be undertaken to develop the conceptual SWMP:</p> <ul style="list-style-type: none"> Delineate the clean and dirty area contributing to runoff (based on the final layout plans) and site-specific hydrological assessments to determine volumes that require to be handled. The SWMP should ensure that temporary drainage installations should be designed, constructed, and maintained for recurrence periods of at least a 25-year, 24-hour event, while permanent drainage installations should be designed for a 50-year, 24-hour recurrence period; and Site specific assessments to establish the appropriate mitigation measures and surface water monitoring programme. 	<p>All water management infrastructure will be designed for a 1:100-year, 24-hour rainfall event.</p>
<p><u>DWS Best Practice Guideline – G4: Impact Prediction</u></p> <p>The impacts of mine activities on the groundwater environment must be assessed as part of the MRA, as well as for the IWULA. The baseline conditions must be assessed to define the current aquifer systems, groundwater use and groundwater conditions before mine commencement and to determine the extent of possible future impacts on the groundwater resources.</p>	<p>An IWULA and an associated IWWMP are required in terms of Section 21 of the NWA.</p> <p>The IWULA and IWWMP will be compiled and submitted to the DWS as the decision-making authority.</p> <p>The EIA as part of the MRA will assess potential impacts on groundwater resources as a result of the Project.</p>
<p><u>National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)</u></p>	<p>A Fauna and Flora Impact Assessment will be conducted as</p>

¹ Previously the Department of Water Affairs (DWA)

Applicable legislation and guidelines used to compile the report	Reference where applied
<p><u>(NEM:BA)</u></p> <p>The NEM:BA regulates the management and conservation of the biodiversity of South Africa within the framework provided under NEMA. This Act also regulates the protection of species and ecosystems that require national protection and also takes into account the management of alien and invasive species. The following regulations which have been promulgated in terms of the NEM:BA are also of relevance:</p> <ul style="list-style-type: none"> • Alien and Invasive Species Lists, 2014 published (GN R.599 in GG 37886 of 1 August 2014); • National Environmental Management: Biodiversity Act, 2004: Threatened and Protected Species Regulations; and • National list of Ecosystems Threatened and in need of Protection under Section 52(1) (a) of the Biodiversity Act (GG 34809, GN R.1002, 9 December 2011). 	<p>part of the EIA Phase. Further to this, Universal will be undertaking a protected tree assessment and permit application for the Dalyshope Coal Mining Project.</p> <p>The application will be submitted to the Department of Agriculture, Forestry and Fisheries (DAFF) and/or the Limpopo Department of Economic Development, Environment and Tourism (LEDET) and/or the South African National Biodiversity Institute (SANBI) for consideration, due to known protected tree species on the site.</p>
<p><u>National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)</u></p> <p>The prevailing legislation in the Republic of South Africa with regards to the Air Quality field is the National Environment Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEM: AQA). According to the Act, the DEA, the provincial environmental departments and local authorities (district and local municipalities) are separately and jointly responsible for the implementation and enforcement of various aspects of NEM: AQA.</p> <p>A fundamental aspect of the new approach to the air quality regulation, as reflected in the NEM: AQA is the establishment of National Ambient Air Quality Standards (NAAQS). These standards provide the goals for air quality management plans and also provide the benchmark by which the effectiveness of these management plans is measured. The NEM: AQA provides for the identification of priority pollutants and the setting of ambient standards with respect to these pollutants.</p>	<p>An Air Quality Impact Assessment will be undertaken as part of the EIA Phase. The Project's activities will set out to abide by the NEM: AQA and standards set out in the NAAQS. The required mitigation will be included in the EMP as part of the EIA Phase.</p>
<p><u>National Dust Control Regulation 2013</u></p>	<p>An Air Quality Impact Assessment will be undertaken as part of the EIA Phase. The Project's activities will set out to abide</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<p>The Minister of Water and Environmental Affairs, released on the 01 November 2013 the National Dust Control Regulation, in terms of Section 53, read with Section 32 of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEM: AQA). In the published National Dust Control Regulations, terms like target, action and alert thresholds were omitted. Another notable observation was the reduction of the permissible frequency of exceedance from three to two incidences within a year. The standard actually adopted a more stringent approach than previously and would require dedicated mitigation plans now that it is in force.</p>	<p>by the NEM: AQA and standards set out in the NAAQS. The required mitigation will be included in the EMP as part of the EIA Phase.</p>
<p><u>National Noise Control Regulations, R.154 of 1992 (the Noise Regulations) promulgated in terms of Section 25 of the Environmental Conservation Act, 1989 (Act No. 73 of 1989)</u></p> <p>The National Noise-Control Regulations (GN R154 in Government Gazette No. 13717 dated 10 January 1992) (NCRs) form part of the Environmental Conservation Act and these Regulations apply to external noise.</p> <p>The NCRs differentiates between Disturbing Noise levels (which is objective and scientifically measurable which are generally compared to existing ambient noise level) and Noise Nuisance (which is a subjective measure and is defined as noise that “<i>disturbs or impairs or may disturb or impair the convenience or peace of any person</i>”).</p> <p>Local Authorities use Controlled Areas to identify areas with high noise levels. Restrictions have been set out for development that occurs in these Controlled Areas. These regulations make provision for guidelines pertaining to noise control and measurements. The regulations make reference to the use of the South African National Standards 10103:2008 (SANS) guidelines for the Measurement and Rating of Environmental Noise with Respect to Land Use, Health, and Annoyance and to Speech Communication.</p> <p>As such, a Noise Impact Assessment in accordance with the NCRs must be undertaken for submission to determine the potential disturbing and nuisance noise levels associated with a particular development.</p>	<p>A Noise Impact Assessment, including modelling, impacts and proposed mitigation measures will be undertaken for the EIA Phase. Over and above the requirements set out in the NCR, a Blast Impact Assessment will also be undertaken.</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<p><u>The National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)</u></p> <p>The National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) is the overarching legislation that protects and regulates the management of heritage resources in South Africa. The Act requires that Heritage Resources Agency's in this case the South African Heritage Resources Agency (SAHRA) and Provincial Heritage Resources Authority of Gauteng (PHRA-G), be notified as early as possible of any developments that may exceed certain minimum thresholds. This act is enforced through the National Heritage Regulations <u>GN R 548</u> (2000).</p>	<p>For the Scoping Phase, a Notice of Intent to Develop (NID) was submitted to SAHRA. A Heritage Impact Assessment will form part of the EIA Phase.</p>
<p><u>GN R 1147 (Financial Provisioning Regulations), 2015</u></p> <p>The Financial Provisioning Regulations prescribe methods for determining the quantum of financial provision for rehabilitation and mechanisms for providing for it. Section 41 (1) of the MPRDA has been repealed and Section 24P of the NEMA, as amended, which provides that the holder of a mining right must make financial provision for rehabilitation of negative environmental impacts. The financial provision must guarantee the availability of sufficient funds.</p>	<p>The Financial Provisioning Regulations are applicable to rehabilitation and closure plans as they prescribe the minimum content of an annual rehabilitation plan and the minimum content of a final rehabilitation, decommissioning and mine closure plan.</p> <p>This will be finalised and included in the EIA.</p>
<p><u>GN R 527 (MPRDA Regulations), 2004</u></p> <p>Regulation 527 (GN R. 527) specifies that the EMP must include environmental objectives and specific goals for mine closure. The applicant for a mining right must make prescribed financial provision for the rehabilitation or management of negative environmental impacts, which must be reviewed annually. R527 provides specific principles for mine closure including safety and health, residual and latent environmental impacts etc.</p>	<p>A preliminary EMP is provided in Section 12.9 of this report.</p>
<p><u>Integrated Development Plan</u></p> <p>Each municipality has an Integrated Development Plan (IDP) which considers all local municipality districts and the needs to be met in these districts.</p>	<p>This report considers the IDP for the Waterberg District Municipality, specifically with reference to the Lephalale Local Municipality where the proposed Project is based.</p>
<p><u>Climate Change Bill, 2018 GN R 580</u></p> <p><i>To build the Republic's effective climate change response and the long term, just transition to a</i></p>	<p>Although not promulgated, Dalyshope must adhere to national climate change legislation in terms of South Africa's goals and</p>

Applicable legislation and guidelines used to compile the report	Reference where applied
<i>climate resilient and lower carbon economy and society in the context of an environmentally sustainable development framework; and to provide for matters connected therewith.</i>	commitments in terms of the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement.

7 Item 2(f): Need and desirability of the proposed activities

Globally, coal plays a vital role in electricity generation. South Africa is primarily reliant on electricity generation from coal-fired power stations. About 77% of the country's primary energy needs are provided by coal (Eskom, 2018). In addition to supplying the local economy, approximately 28% of South Africa's production is exported. Renewable and alternative energy sources cannot yet meet the demands of the country's electricity needs. Coal mining is, therefore, crucial for the supply of coal to meet the energy needs of the country's economy and until alternative energy generation options can be implemented on a sufficiently large scale, South Africa remains mainly dependent on coal mining. The availability and access of coal in the Waterberg region is becoming increasingly important.

The proposed Dalyshope Coal Mining Project will provide approximately 12 Mtpa of coal for supply to Eskom for the first five years and/or export markets, thereby assisting with the alleviation of the shortage of supply.

The Limpopo Employment, Growth and Development Plan (2009-2014), recognises that the development of the coal, energy and petrochemicals cluster is critical to the achievement of its employment, growth and development objectives. The LLM's economy is dominated by current coal mining and power generation activities. The coal mining industry is an important employer.

The positive aspects of the proposed mining operations on the farm Dalyshope include the benefits of additional income generation in the area. The proposed Project will result in the development of the mine within the LLM and thus ensure that the mining activities create economic benefits to support the local and national economic and social needs. The employment of local labour will decrease the unemployment rate (by implementing a Social Labour Plan) in the area, as well as allow for the uplifting of the local communities. Thus, the proposed Project will result in employment opportunities and skills development in the area.

7.1 Questions to be engaged with when considering need and desirability

The Guideline on the assessment of Need and Desirability (DEA, 2017) includes a number of questions, the answers to which should be considered in the EIA Process. Table 7-1 present the needs and desirability analysis undertaken for the Dalyshope Coal Mine Project.

Table 7-1: Need and Desirability

Theme	No.	Question	Response
Securing ecological sustainable development and use of natural resources"	1	How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?	<p>The proposed Project is within an ecologically sensitive area. During the EIA Phase, the impacts to each environmental aspect will be assessed according to the Digby Wells impact assessment methodology.</p> <p>Based on an environmental screening of the Mining Right area, the Applicant has adjusted the Mine plan to reduce the areas impact of mining on sensitive pans and terrestrial ecology areas.</p>
	1.1	How were the following ecological integrity considerations taken into account?	
	1.1.1	Threatened Ecosystems	<p>The Project is located within the Least threatened Limpopo Sweet Bushveld biome with vulnerable, near threatened and protected floral species potentially occurring on site. A total of 12 faunal and 14 avifaunal species potentially found in the Project area are listed in the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species. This includes Endangered (EN), Near Threatened (NT), and Vulnerable (VU) species. These have been listed in the section 10.7.</p>
	1.1.2	<p>Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.</p>	<p>A desktop investigation identified that the landscape comprises of depressional pans, which are small (deflationary) depressions circular or oval in shape; usually found on the crest positions in the landscape. The identified wetlands were all classified as non-Perennial Episodic Endorheic Depression Pans based on the principles of the hydro geomorphic (HGM) approach to wetland classification. Further to this, the permitting process to relocate protected trees is also being undertaken (see section 10.7.2).</p>

1.1.3	Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)	<p>A Critical Biodiversity Area and Protected Area were identified within a close proximity to the study area (see Figure 10-25 and Figure 10-26).</p> <p>The proposed Project area falls largely within the 'CBA Irreplaceable' (CBA 1), which is an area characterised by natural landscapes with no disturbances, and which are irreplaceable in terms of reaching conservation targets within the district.</p> <p>The initial proposed mining area included four open pits, however, environmental sensitivities on site were mapped and areas of mining were reduced to avoid sensitive environmental areas.</p>
1.1.4	Conservation targets	<p>These will be considered during the EIA Phase and responded to accordingly.</p>
1.1.5	Ecological drivers of the ecosystem	
1.1.6	Environmental Management Framework	
1.1.7	Spatial Development Framework (SDF)	<p>The Waterberg District Municipality IDP, informed by the SDF, was referenced for the compilation of this Scoping Report, and will be considered in the EIA Phase.</p>
1.1.8	Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.)	<p>A desktop survey of wetlands was carried out for the Scoping Phase which referenced NFEPA wetlands. No RAMSAR sites are present in the vicinity of the Project area.</p>
1.2	How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity? What measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	<p>As mentioned, the applicant will investigate the permitting process regarding protected tree species on site. This will also be investigated during the EIA Phase.</p>

1.3	How will this development pollute and/or degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	
1.4	What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimise, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?	<p>The alternatives take into consideration options to minimise the amount of waste stockpile material on site and / or ways to reduce their impact on the receiving environment.</p> <p>The proposed wastewater management initiatives include the separation of clean and dirty water streams, as well as the use of dirty water channels towards a sump at the stockpile dumping areas, which will drain into the mining pit to be pumped to the two PCD.</p>
1.5	How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	<p>A desktop survey has been conducted for the Scoping Phase but the extent to which cultural heritage sites will/may be disturbed will be investigated in the EIA Phase.</p>
1.6	How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	<p>Coal extraction for use in electricity generation is a non-renewable energy resource, however, South Africa is dependent on coal and until the energy supply and demand can feasibly be replaced with renewable energy, non-renewable energy sources will be required. The extent of any positive impacts associated with this Project will be investigated in the EIA Phase.</p> <p>Preliminary impacts of the proposed project have been identified and mitigation measures aimed at avoiding, reducing and / or managing the negative impacts as well as enhancing the positive</p>

			impacts have been recommended.
1.7	How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardise the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds? What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimise the use of resources? What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts?		The Scoping Phase has confirmed the presence of wetlands and the potential for extensive water management on site for the proposed mine due to groundwater disturbance. The extent of these impacts and potential mitigation can only be determined in the EIA Phase. It must be noted that avoidance of this impact would result in the No-Go alternative being implemented, as the coal seam is too shallow to motivate underground mining.
1.7.1	Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. de-materialised growth)? (note sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life)		Historically, Eskom has struggled to secure coal from South African mining operations due to international prices of coal yielding more profit for mines. South Africa will be a coal-dependent country for the foreseeable future.
1.7.2	Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources this the proposed development alternative?)		The socio-economic impacts as a result of coal mining proceeding will be assessed in the EIA Phase.
1.7.3	Do the proposed location, type and scale of development promote a reduced dependency on resources?		A sensitivity map was generated in the pre-application phase which identified all the natural sensitivities identified thus far.

			The EIA will provide mitigation measures to reduce the overall impact of the mine in terms of scarce resource usage.
1.8	How were a risk-averse and cautious approach applied in terms of ecological impacts?		Sufficient information was gathered prior to the onset of this process to indicate that the potential mining of coal is feasible.
1.8.1	What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?		In terms of the socio-economic impacts, the current knowledge gaps include:
1.8.2	What is the level of risk associated with the limits of current knowledge?		<ul style="list-style-type: none"> The Social Scoping Report is solely based on secondary data. The sources consulted during the compilation of the report are not exhaustive but deemed sufficient to meet the Scope of Work for the current Scoping phase. No relevant information was deliberately excluded from the said report.
1.8.3	Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?		<ul style="list-style-type: none"> It was assumed that the motivation for, and the ensuing planning and feasibility studies of the Project were done with integrity, and that the information provided to date by the independent EAP was accurate.
1.9	How will the ecological impacts, resulting from this development impact on people's environmental right in terms following:		This will be investigated and quantified by each specialist and presented in the EIA Phase.
1.9.1	Negative impacts: e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?		
1.9.2	Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts?		

	1.10	Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	
	1.11	Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	
	1.12	Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable environmental option" in terms of ecological considerations?	Alternatives in terms of infrastructure placement were investigated in the pre-application phase, through the identification of sensitive areas on site. Sensitive areas on site were avoided as far as possible.
	1.13	Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and existing and other planned developments in the area?	Cumulative impacts will be investigated and presented during the EIA Phase.
justifiable economic and social	2.1	What is the socio-economic context of the area, based on, amongst other considerations, the following considerations?	
	2.1.1	The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any other strategic plans, frameworks of policies applicable to the area,	The socio-economic baseline took the Waterberg District Municipality IDP into consideration. The IDP presents issues and requests raised by residents in the Waterberg Municipality. The vision and mission of the WDM was revised during the strategic planning session to inform the 2019-2020 IDP document. The vision

			and mission both centre around energy and minerals, as well as ecotourism. The IDP identified the development potential of the mining industry within the Waterberg District Municipality. This includes beneficiation, mining tourism, the platinum corridor and a mining logistics hub. The proposed Dalyshope Project Life of Mine will be approximately 30 years, thus allowing Dalyshope project to continue supplying jobs at that mine for a longer time period. The surrounding communities will also continue to benefit through direct and indirect income, as well as the mine's use of local contractors and suppliers
	2.1.2	Spatial priorities and desired spatial patterns (e.g. need for integrated of segregated communities, need to upgrade informal settlements, need for densification, etc.),	The spatial and economic development projects will be implemented through the Municipality IDP.
	2.1.3	Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.), and	The proposed project will promote and support the sustainability of existing business, as well as assist in increasing local beneficiation and shared economic growth, through the LOM by 30 years.
	2.1.4	Municipal Economic Development Strategy ("LED Strategy").	
	2.2	Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?	The proposed Project will result in job opportunities. The positive impact from the Project will be recognised through implementing the Community Development Projects as presented in the SLP.
	2.2.1	Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?	Yes, LED initiatives and skills development form part of the identified Community Development Projects as included in the SLP.
	2.3	How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	The Company will implement the SLP Community Development projects and initiatives which are based on the requirements identified by surrounding communities through the SLP consultation

			process.
2.4	Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and long-term? Will the impact be socially and economically sustainable in the short- and long-term?		The aim of the SLP is to initiate projects which develop the surrounding communities which may be impacted by a proposed mining project. The mine itself will have a LoM of 30 years and therefore will present long-term sustainable employment. However, the SLP initiatives must also provide long-term sustainable projects that the community can adopt and manage.
2.5	In terms of location, describe how the placement of the proposed development will		
2.5.1	result in the creation of residential and employment opportunities in close proximity to or integrated with each other,		The mine will employ approximately 1200 employees for the Dalyshope operation. This will, however, be a contractor-run-operation.
2.5.2	reduce the need for transport of people and goods		Coal product will be trucked or transported via rail to various markets. The Applicant will also provide employee transport to and from the mine thereby mitigating increased traffic for individual road users.
2.5.3	result in access to public transport or enable non-motorised and pedestrian transport (e.g. will the development result in densification and the achievement of thresholds in terms public transport),		
2.5.4	compliment other uses in the area,		A Traffic Impact Assessment will be undertaken in the EIA Phase, which will establish potential congestion on surrounding roads and provide mitigation measures to manage the impact. The Applicant will be required to upgrade the road from site leading to Steenbokpan to accommodate impacts related to haul trucks using this road.
2.5.5	be in line with the planning for the area,		The proposed LoM is 30 years and the Closure and Rehabilitation Report will consider end-land use in line with the LED Strategy.
2.5.6	for urban related development, make use of underutilised land available with the urban edge,		Not applicable. The proposed Dalyshope Project area is outside an urban area.

	2.5.7	optimise the use of existing resources and infrastructure,	No infrastructure is available on site which can be utilised as part of the mining operation; however, the proposed infrastructure on site will all be removed during decommissioning and will therefore not create unwanted infrastructure either.
	2.5.8	opportunity costs in terms of bulk infrastructure expansions in non-priority areas (e.g. not aligned with the bulk infrastructure planning for the settlement that reflects the spatial reconstruction priorities of the settlement),	No bulk infrastructure will form part of this development.
	2.5.9	discourage "urban sprawl" and contribute to compaction/densification,	The project area and surrounds are fairly rural and cannot therefore influence urban sprawl.
	2.5.10	contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in excess of current needs,	The Community Development projects associated with the SLP will prioritise Historically Disadvantaged South Africans as beneficiaries.
	2.5.11	encourage environmentally sustainable land development practices and processes,	The proposed land use for the Dalyshope Project will be developed with effort made towards being environmentally sustainable in the long term. One of the key aspects to ensuring long terms land sustainability will be to ensure successful rehabilitation and post mining land-use capability.
	2.5.12	take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.),	The location of the proposed Project is dependent on the location of the identified coal resource.
	2.5.13	the investment in the settlement or area in question will generate the highest socio-economic returns (i.e. an area with high economic potential),	The proposed project will allow the mine to continue contributing to the local, regional and national Gross Domestic Product (GDPs), and also to the local communities through continued employment of workers and local contractors, as well as other influences and community upliftment programmes that are undertaken by the mine

			through their SLP.
2.5.14	impact on the sense of history, sense of place and heritage of the area and the socio-cultural and cultural-historic characteristics and sensitivities of the area, and		The impact to cultural heritage will be investigated during the EIA Phase.
2.5.15	in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?		The proposed project will ensure continued employment in the area, as well as programmes implemented from the mine's SLP.
2.6	How were a risk-averse and cautious approach applied in terms of socio-economic impacts?		Socio-economic impacts will be investigated during the EIA Phase.
2.6.1	What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?		Gaps in knowledge, uncertainties and assumptions will be determined during the EIA Phase and presented in the EIA Report.
2.6.2	What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge?		
2.6.3	Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?		
2.7	How will the socio-economic impacts, resulting from this development impact on people's environmental right in terms following:		
2.7.1	Negative impacts: e.g. health (e.g. HIV- Aids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?		A Social Impact Assessment will be conducted during the EIA Phase which will consider the extent and significance of the proposed impacts presented in this section.
2.7.2	Positive impacts. What measures were taken to enhance positive impacts?		

	2.8	Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts (e.g. over utilisation of natural resources, etc.)?	
	2.9	What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	
	2.10	What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development located appropriately)? Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?	
	2.11	What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?	
	2.12	What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?	
	2.13	What measures were taken to:	
	2.13.1	ensure the participation of all interested and affected parties,	During the pre-application and Scoping Phase, an I&AP database

			was developed to identify and verify the directly and indirectly affected landowners or land occupiers as well as the potentially affected surrounding communities. This database will be updated throughout the EIA Process to ensure adequate consultation.
	2.13.2	provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation,	Digby Wells will maintain and update the I&AP database to ensure communication with all registered I&APs. Site notices have been erected in various locations around the site and in the nearest communities to announce the Project, SMS notifications will be utilised to provide progress reports to I&APs as well as Digby Wells contact information for further consultation. Public meetings will be held in both the Scoping and EIA Phases to engage with any I&AP who wishes to attend, and the Project will be presented at these meetings as well as the findings of the impact assessments.
	2.13.3	ensure participation by vulnerable and disadvantaged persons,	Site notices have been placed, and a meeting held in areas easily accessible to the most disadvantaged affected community. The Background Information Document will be translated from English into Setswana and a translator will also attend all public meetings to fully engage with all affected stakeholders.
	2.13.4	promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means,	The consultation process seeks to inform affected communities of the positive and negative impacts associated with a proposed Project and provide opportunity for any stakeholder to raise concerns which will be responded to both on record in the reports and through direct written response (where possible). Furthermore, the Applicant will create community forums with guidance from the Municipality.
	2.13.5	ensure openness and transparency, and access to information in terms of the process,	Digby Wells is bound by legislation and regulations to share information pertaining to the Project, to be transparent and impartial.

	2.13.6	ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge, and	All stakeholder needs will be accommodated as far as is reasonable.
	2.13.7	ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein was be promoted?	The EAP cannot force participation from specific demographics. Cultural norms will be respected and adhered to; however, no demographic can be excluded from public consultation and therefore all registered stakeholders and meeting attendees will be considered intrinsic to the public consultation process and outcomes.
	2.14	Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?	
	2.15	What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected	The Applicant must produce a Health and Safety policy and best practice on site, compliant with the Mine Health and Safety Act, 1996 (Act No. 29 of 1996).
	2.16	Describe how the development will impact on job creation in terms of, amongst other aspects:	
	2.16.1	the number of temporary versus permanent jobs that will be created,	The total number of employees will be approximately 1200. The Dalyshope Coal Mining Project will be a contractor-run operation, meaning most of the staffing will be employed by the mining and engineering contractors.
	2.16.2	whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available	Provision has been made in the SLP to address some of the skills required for the operation, specifically for low-level skills

	in the area),	development.
2.16.3	the distance from where labourers will have to travel,	A total of 1200 job opportunities will be created as a result of the Project, however, it is too early in the process to confirm from what distance labourers will be required to travel, as the labour force has not yet been appointed. The Applicant is committed to source labour from the nearest affected community and only search beyond the constraints of the immediate employment catchment zone if the skills required cannot be accommodated.
2.16.4	the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), and	
2.16.5	the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.).	The number of farm workers who may be displaced should the Project proceed will be determined during the EIA Phase.
2.17	What measures were taken to ensure:	
2.17.1	that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and	Digby Wells has identified the relevant government organisations which must be consulted throughout the EIA Process. Furthermore, this application is in terms of the One Environmental System and Digby Wells shall endeavour to align the various procedures to reduce stakeholder fatigue.
2.17.2	that actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures?	The Scoping and EIA process requires governmental departments to communicate regarding any application. In addition, all relevant Departments and key stakeholders have been notified about the project by the EAP and registered as Interested and Affected Parties who will continue to be notified and engaged with regarding the project throughout the EIA process.
2.18	What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage?	As part of the EIA Process, Financial Liability for the Applicant will be calculated to determine the cost of decommissioning and rehabilitating the mine site to an end-land use which is sustainable and in the best interest of both the surrounding communities and the

	2.19	Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?	environment.
	2.20	What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects will be paid for by those responsible for harming the environment?	
	2.21	Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?	The layout of the proposed mining infrastructure was informed by sensitivity mapping of the full Mining Right Application area.
	2.22	Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area?	Cumulative impacts will be assessed during the EIA Phase and presented in the EIA Report.

8 Item 2(g): Period for which the environmental authorisation is required

The proposed LoM for the Project will require Environmental Authorisation for a period of 30 years.

9 Item 2(h): Description of the process followed to reach the proposed preferred site

The location of the Project has been decided by the location of the identified coal seams. Anglo undertook prospecting activities on the affected farm portions and determined the pit area based on the location of coal. The initial proposed mining area included four open pits, however, due to mapping the environmental sensitivities on site, this application only considers one open pit, OC1 (refer to Figure 4-3). OC1 and the infrastructure areas will be investigated during the EIA Phase of the Project and should any area within the Prospecting Right be deemed unsuitable for the proposed mining activities, then this will be stated in the EIA.

9.1 Item 2(h)(i): Details of all alternatives considered

9.1.1 Design and Layout of the Project

A sensitivity map was produced in the pre-application phase of the Project to determine “no-go” areas on site. Therefore, alternative locations for placement of infrastructure include Dalyshope 232 LQ and Klaarwater 231 LQ. This has informed the development of the mine infrastructure layout plan to significantly reduce impacts prior to the impact assessment being conducted. These alternatives will be further investigated during the EIA process.

9.1.2 Mining Method Alternatives

The proposed alternatives for coal extraction considered underground versus opencast mining. Truck and shovel opencast strip mining using selective mining techniques was the preferred mining method for this deposit. The proposed method will incorporate a roll-over method of concurrent backfilling of the void left behind by mining. This opencast mining method suits shallow coal seams in a consistent, flat lying orientation, thus deemed most economically viable for the proposed Project.

9.1.3 Water Supply Alternatives

The Limpopo Water Management Area (WMA) is a water scarce catchment. Regional water balance calculations completed in 2010 by O’Beirne indicate the Limpopo WMA water resource is depleted, dictated by basic human needs, ecological reserve requirements and industrial demands. Water supply schemes and systems currently proposed for the catchment will help alleviate the current supply and demand requirements, but the negative impacts already established on the ecosystem and groundwater resource will not be rectified

by these schemes. Increased industrialisation and human need requirements associated with the increase in job creation will potentially worsen the impacts to the groundwater resource and ecosystem requirements (Digby Wells, 2013b). Initial groundwater assessments indicate that 84.8 m³/day could potentially be sourced from groundwater resources in a 10 km to 15 km radius of the Dalyshope Coal Mining Project. Effective spacing between water supply (production) boreholes in addition to controlling abstraction to sustainable limits (based on recharge potential) is vital to maintaining the groundwater resource for prolonged use (Digby Wells, 2014a and 2014b).

An initial assessment of the predicted raw and potable water demand for the mining operation has been made. Approximately five megalitres per day (5ML/d) of water will be required for the first five years of the operation. Various options have been considered for the source of the raw water. These options are:

- Raw water sourced from the Anglo-American coal bed methane project situated approximately 30 km east of the mine;
- Water sourced from local sewage treatment plants in Lephalale – this source could already be allocated to third parties and an agreement may be made with said third parties for excess allocation and therefore may not be viable;
- Boreholes in the vicinity of the mine;
- Allocation from the proposed Phase 2 Mokolo-Crocodile West Water Augmentation Project (MCWAP); and
- Raw water drawn from the Limpopo River.

9.1.4 Electricity Supply Alternatives

As this is a contractor operated mine, most of the mining operations will be carried out by diesel operated equipment. Only the offices and the bulk material handling facilities will require electricity. Temporary power will be sourced from diesel generators until a firm supply from Eskom can be established.

9.1.5 Transportation of Coal

The market to which the coal product from this proposed mining operation will be trucked to is still being negotiated. The coal product will either be transported by haul trucks on the Steenbokpan road or by means of a rail line, should the latter be possible based on proposed rail loops and connections from neighbouring mining operations. A Traffic Impact Assessment will be conducted during the EIA Phase, although the proposed preferred haul road is the Steenbokpan road due to the limited haulage route options in the vicinity.

9.1.6 The “No-Go” Alternative

The No-go alternative is the option of not mining coal in the area. This option also means that all potential negative impacts associated with the proposed mine and its associated infrastructure would not occur. However, the potential benefits associated with the Project would also not occur. According to the Waterberg District Environmental Management Framework, the area within which the proposed Project falls has been earmarked for mining and power generation development as these two sectors currently drive the economic value of production in the LLM. With the proven coal reserve in the Waterberg area, prohibiting the Project from proceeding will not only impede valuable socio-economic opportunities in the LLM but South Africa as a whole.

9.2 Item 2(h)(ii): Details of the Public Participation Process followed

As part of planning for face to face stakeholder consultations, Digby Wells submitted a Stakeholder Engagement Plan (SEP) as per the Covid-19 Regulations (GN R 650 of 5 June 2020) of the DMRE. It should be noted that the Plan was approved by the DMRE prior to the commencement of the public participation activities. During the Scoping Phase, the following core stakeholder engagement activities were undertaken:

- Stakeholders (including Government Departments, landowners, land occupiers, communities, Non-Governmental Organisations, agricultural organisations, Parastatals and businesses) have and will continue to be identified and captured in a stakeholder database;
- A Background Information Document (BID) and letter was distributed to the identified I&APs together with the placement of adverts and site notices around the Project area;
- The environmental Scoping Report and associated documentation was made available for public comment for a period of 30 days, from 24 June 2020 to 24 July 2020;
- Due to the COVID-19 national lock down, the Draft Scoping Report was released electronically and could be accessed on the Digby Wells website and via our data-free service portal;
- A Public Meeting and a Focus Group Meeting with the directly affected land occupiers were held on 16 July and 17 July 2020, respectively; and
- Suggestions and concerns received during the public comment period have been recorded and responded to in Table 9-2 below, and included in the Public Participation Report attached in Appendix C.

Table 9-1 provides a summary of the PPP activities undertaken to date.

Table 9-1: Public Participation Scoping Phase Activities

Activity	Details
Identification of stakeholders	Stakeholder database which represent various sectors of society, including directly affected and adjacent landowners, in and around the proposed Project area.
Distribution of BID announcement letter	A BID with registration and comment form was emailed to stakeholders on 20 April 2020 and 24 June 2020. An SMS was also sent to stakeholders announcing the availability of the Draft Scoping Report.
Placing of newspaper advertisement	A newspaper advertisement was placed in the Mogol Post to announce the extended public comment period once the national lock down ends and consultation can commence.
Putting up of site notices	Site notices were put up at the proposed Project site, a community centre, municipal offices and frequently visited shops on 25 February 2020. <i>A site notice placement report and map were developed to indicate the locations of site notices in and around the Project area.</i>
Announcement of Draft Scoping Report	Announcement of availability of the Draft Scoping Report was emailed and sent via SMSs to stakeholders together with the formal project announcement on 20 April 2020 and 24 June 2020. The Draft Scoping Report was released electronically and made available to stakeholders on the Digby Wells website (www.digbywells.com under Public Documents) and could be accessed via our data-free service portal. Note: Due to COVID-19 Regulations, no documents were placed at public areas. Stakeholders were sent a data-free link where they could access the reports. http://view.datafree.co/PublicDocuments/
Public Meetings	A Public Meeting and a Focus Group Meeting with the directly affected land occupiers were held on 16 July and 17 July 2020, respectively.
Obtaining comments from stakeholders	Comments, issues of concern and suggestions received from stakeholders were captured in the Comment and Response Report (CRR). The CRR is appended to this report (refer to Appendix C).
Announcement of Final Scoping Report	This report will be made available on www.digbywells.com (under Public Documents).

9.3 Item 2(h)(iii): Summary of issues raised by I&APs

Comments and Response Report (CRR) has been compiled capturing all stakeholder comments obtained during the Scoping Phase public comment period. The CRR is contained in Table 9-2, below.

Table 9-2: Comments and Responses Received During Scoping Phase

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Scoping Phase						
Stakeholder Engagement	If I understand correctly, the comments can only be given after the stakeholder engagement and discussion of related documents and reports.	Bernard Enslin	Servitudewatch CC	20-Apr-20	Email	The Scoping Report was released during the South African national lockdown period. It was therefore communicated via the associated notification to inform I&APs that the comment period will be extended beyond the usual 30-day comment period. It was communicated to registered I&APs on 24 June, that the Draft Scoping Report was available via Digby Wells website on the data-free portal for a further 30 days public comment from 24 June 2020 to 24 July 2020. Comments were, however, accepted and captured from 20 April 2020 to 24 July 2020.
Violation of people's constitutional rights	In the absence of public meetings – esp. given that not everyone has access to the internet where they can review the report and provide comments. The client should park the project until SE can be				Telephonic	The comment period will be extended as per the DMR's instructions published on the 9th April and that we will explore other avenues to engage with stakeholders once we have been instructed by the government on the next steps re the lockdown.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	undertaken properly.					
Registration I&AP	Hi there Please register WESSA as an I@AP for this process: UCD6170 Patrick Dowling Wildlife and Environment Society of South Africa – Environmental Governance group	Patrick Dowling	Wildlife and Environment Society of South Africa – Environmental Governance group	20-Apr-20	Email	Good day, Thank you for your response. Please note that we have registered WESSA as an I@AP, and have sent notifications to the emails below: wessa@limpopomail.co.za/ info@wessanorth.co.za Could you please provide us with additional emails if there are any
Documents receipt confirmation	Dear Janet Thank you for your notification and information document. We hereby confirm receipt	Lerato Ratsoenyane	Ledjadja Coal (Pty) Ltd	20-Apr-20	Email	As a registered I&AP, all further communications will be provided throughout the remainder of the project.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	and will go through the documents. Please do keep us informed of the engagement meetings to follow as we will participate as neighbouring mine and landowners.					
Registration I&AP	Good day, Attached please find Registration form on behalf of Eskom Distribution Limpopo	Mr Xander Neethling	Eskom Distribution Limpopo	20-Apr-20	Email	Good day Xander, Your email has been received with thanks. Please note that your comments will be captured on the CRR and you will be registered as an I&AP for the project.
Impact of the Project	Existing Eskom electrical network and future supply to the customer				Registration and Comment sheet	Power requirements for the project will be determined during the feasibility study and any impact to the existing and future supply will be discussed and addressed with Eskom once fully understood.
Project impacts on infrastructure you might have (e.g. houses, buildings, roads)?	Eskom powerlines					Noted.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Registration of I&AP and Request for EIA documents	<p>Dear Madam Herewith included please find the I&AP registration form for the above-mentioned project. This registration is on behalf of the Wildlife and Environment Society of South Africa (WESSA) and correspondence must be directed in future to myself (above email address) and Dr Jeremy Anderson at conserva@global.co.za. The comments submitted on the accompanying document are based on the Announcement Letter and BID and are thus not comprehensive or complete. It will be necessary to be furnished with the EIA document and specialist reports and to be fully informed of the EA process including PPP meetings for this project as</p>	Dr Llew Taylor	Wildlife and Environment Society of South Africa (WESSA)	29-Apr-20	Email	<p>Good day Dr Llew Taylor Your email has been received with thanks. Kindly note that your comments will be captured on the CRR and you will be registered as an I&AP for the project. Please Note: Due to the COVID-19 national lock down, the Draft Scoping report for the project has been made available on the Digby Wells website www.digbywells.com under public documents, for your perusal and comments. Furthermore, the public engagement process will be extended, and this timeframe will be shared with I&APs once the timeframe can be determined. Please do not hesitate to contact us for any additional information required. Kindest Regards, Stakeholder Engagement Team</p> <p>All registered I&APs were notified on 24 June 2020 of the data-free download and extended comment period. The EIA will be provided to the public for</p>

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	these become available in the future. Please acknowledge receipt of this email. Thanking you in advance.					comment when available and all registered I&APs will be informed of its availability and methods of access.
How do you think the project might impact (affect) you?	Not necessarily, Interest taken in respect of representative of WESSA				Registration and Comment sheet	WESSA representative registered as an I&AP in April 2020.
Are there any environmental, social or heritage features on the	1. Proximity to Limpopo River and Airport. 2. Question of classification of area by Limpopo					The airports or landing strips identified in the area are listed below with their distance from the proposed mining activity:

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
proposed project area we need to be aware of?	Government- in terms of Limpopo Bioregional plan					<ul style="list-style-type: none"> • Exxaro Manketti runway – 35km from site • Fahad N R Balala Lodge – 47km from site • Macheneng Airport (Botswana) – 50km from site • Ellisras Airport – 50 km from site • Kera Landing Strip - 63km from site <p>It is unlikely any of these airports will be impacted but should Digby Wells be unaware of any privately owned landing strips in the area, kindly provide us with the relevant information.</p> <p>Digby Wells will undertake the relevant specialist studies pertaining to Critical Biodiversity Areas and this will be presented in the EIA Phase.</p>
Where are these found?	Impact a local communities' agricultural activities in short, medium and long term.					This comment has been provided to the Pedological specialist and will be considered in the impact assessment phase.
If so, how can these impacts (affects) be managed, avoided or fixed?	Require Scoping Report and EIA report/ process (in time) to tackle valued judgements and comments.					The Scoping Report was available for download from 20 April 2020 until 24 July 2020 (data-free download available from 24 June to 24 July). All registered I&APs will be informed of the EIA Report

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						availability and the dates for comment.
Registration I&AP	Hi, Please register me and Michael Taffa as interested and affected parties on this project (see attached). Regards	Alan Bosman	Eskom Holdings (Pty) Ltd	26-Jun-20	Email	Dear Alan, Thank you for your communication and interest in the Dalyshope Coal Mining Project. Kindly note that your comments will be captured on the Comment and Response Report and you will be registered as an I&AP for the project. Warm Regards,
How do you think the project might impact (affect) you?	Road, Rail traffic, potential pollution and crime.				Registration and Comment sheet	A Traffic Impact Assessment, Air Quality Impact Assessment and Socio-economic Impact Assessment will be undertaken as part of the EIA Phase. The Applicants are responsible for security from their site. This will include ensuring neighbouring farms are not illegally accessed, nor allow any unauthorised entry onto the mine site. The Standard Operating Procedure (SOP) will be developed and shared with neighbouring landowners once the mine has been approved.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Project impacts on socio-economic conditions (e.g. livelihoods, farm, business, household)?	Possible air quality and groundwater impacts as well as traffic and crime.					A Traffic Impact Assessment, Air Quality Impact Assessment, Socio-economic Impact Assessment and Groundwater Impact Assessment will be undertaken as part of the EIA Phase
How can these impacts be managed, avoided, and/or fixed?	Careful impact assessment, planning and successful implementation of mitigation measures.					Impacts and the associated mitigation will be investigated by the various specialists in the EIA Phase of the Project. Should this Project be approved, the Applicant will be committed to environmental audits conducted by independent environmental consultants to measure compliance with the Environmental Management Plan.
If you are a landowner or occupier, what is your land currently being used for?	Industrial, agricultural and game management.					Thank you for the information provided.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Are there any environmental, social or heritage on the proposed project area we need to be aware of?	Not known.					Thank you for your response.
Project impacts on infrastructure you might have (e.g. houses, buildings, roads)?	Road and Rail Impacts.					<p>Digby Wells has been appointed to conduct a Traffic Impact Assessment during the EIA Phase.</p> <p>All infrastructure within the blast radius must also be considered in the Blast Impact Assessment to be conducted during the EIA Phase.</p>
If so, how can these impacts (affects) be managed, avoided or fixed?	Careful planning and implementation of mitigation measures.					<p>Impacts and the associated mitigation will be investigated by the various specialists in the EIA Phase of the Project.</p> <p>Should this Project be approved, the Applicant will be committed to environmental audits conducted by independent environmental consultants to measure compliance with the</p>

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						Environmental Management Plan.
General comments	Concern over impact on international River (Limpopo); Potential pollution; Crime impact; and Traffic management					Thank you, your comments have been captured and will be considered during the EIA Phase.
Registration I&AP	<p>Good day, I would like to register as an I & A party. I object against this proposed project due to quite a few reasons. Will there be any public participation? If so, when? Please send me the information. Regards E Greyling</p>	Elana Greyling	Community	01-Jul-20	Email	<p>Good day Ms. Greyling, Thank you for your email. Can you please complete the attached so that we have all your contact information and written comments. Kind regards, Stakeholder Engagement Team</p> <p>Ms Greyling has been registered as an I&AP and has been included in all correspondence pertaining to public participation. No further communication was received during the Scoping Phase public comment period.</p> <p>Due to Covid, no public meetings were held but data free access to the Scoping Report was provided to all I&APs. Focus</p>

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						Group Meetings were held with community representatives on 16 July and with directly affected landowners on 17 July.
Air Quality impacts	Ambient Air Quality Standards within the Waterberg District Municipality is affected	Vincent Raphunga (Air Quality Officer)	Waterberg District Municipality	01-Jul-20	Registration and Comment sheet	The Air Quality Impact Assessment will consider the cumulative impacts with respect to air quality.
Project impacts on socio-economic conditions (e.g. livelihoods, farm, business, household)?	Health of the Community could be negatively affected and comprised.					Consultation with the Lephalale Municipality indicated that air quality has deteriorated due to the power stations in the region. The Air Quality Impact Assessment will look at the baseline air quality (ie, the air quality in the area before the project is implemented) and the potential for increased air pollution if the project is implemented.
Impacts mitigation	All activities must be done according to Air Quality Acts and Regulations.					Noted. The Air Quality Impact Assessment report will be compliant with NEMA, NEM:AQA and relevant regulations.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
General comments	Please find attached Eskom general comments for works at or near Eskom infrastructure. Please send me a KMZ file of the affected property / proposed mining area. Kind regards	John Geeringh	Eskom Transmission Division	09-Jul-20	Email	The Applicant, Anglo, acknowledges these comments. Eskom is a registered I&AP and will be informed throughout the remainder of the Environmental Authorisation Application process. These comments have been provided to the Applicant as some of these comments fall outside the current process to which this report pertains.
General comments	1. Eskom's rights and services must be acknowledged and respected at all times.					
General comments	2. Eskom shall at all times retain unobstructed access to and egress from its servitudes.					
General comments	3. Eskom's consent does not relieve the developer from obtaining the necessary statutory, landowner or municipal approvals.					The wayleave applications are separate application processes to the Environmental Authorisation process.
General comments	4. Any cost incurred by Eskom as a result of non-compliance to any relevant					

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	environmental legislation will be charged to the developer.					
General comments	5. If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the developer's activities or because of the presence of his equipment or installation within the servitude restriction area, the developer shall pay such costs to Eskom on demand.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	6. The use of explosives of any type within 500 metres of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the developer must give at least fourteen working days prior notice of the commencement of blasting. This allows time					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process. It is advisable to make application separately in this regard.					
General comments	7. Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilised so as to prevent erosion. The measures taken shall be to Eskom's satisfaction.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	8. Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	developer, his/her agent, contractors, employees, successors in title, and assignees. The developer indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the developer's equipment.					
General comments	9. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	such permission is granted the developer must give at least seven working days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager					
General comments	10. Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	11. Under no circumstances shall rubble, earth or other material be dumped within the servitude restriction area. The developer shall maintain the area concerned to Eskom's satisfaction. The developer shall be liable to Eskom for					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	the cost of any remedial action which has to be carried out by Eskom.					
General comments	12. The clearances between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	13. Equipment shall be regarded electrically live and therefore dangerous at all times.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	14. In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as an additional					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	safety precaution, Eskom will not approve the erection of houses, or structures occupied or frequented by human beings, under the power lines or within the servitude restriction area.					
General comments	15. Eskom may stipulate any additional requirements to highlight any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	16. It is required of the developer to familiarise himself with all safety hazards related to Electrical plant.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	17. Any third-party servitudes encroaching on Eskom servitudes shall be registered against Eskom's title deed at the developer's own cost. If such a					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	servitude is brought into being, its existence should be endorsed on the Eskom servitude deed concerned, while the third party's servitude deed must also include the rights of the affected Eskom servitude.					
Request for clarification	Is this meeting intended to continue with the Social and Labour Plan discussion?	L Molefe (Ward Committee Representative)	Lesedi Community	16-Jul-20	Focus Group Meeting	<p>No, the purpose of this meeting is to present the project and its potential impacts as identified in the Scoping Phase. The Scoping Phase looks at the environmental baseline (the environment before the project is implemented). The next phase of the application process is the Impact Assessment Phase, which includes specialist studies which look at the project impacts in detail. Specialist studies are currently underway. The Environmental Impact Assessment Report will include a summary of the specialist studies, and all the specialist studies will be made available to the public for review.</p> <p>The SLP discussions will be resumed at a later date once Digby Wells and</p>

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						Universal Coal have received DMR directives related to the draft SLP submitted.
SLP to address the demands	We understand that the municipality does not perceive the Lesedi as a formal settlement; however, we need the SLP to address issues related to water and other infrastructure development in the area.	D. Majapholo (Community Rights Defender)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted.
Access to Permits	Digby Wells will undertake several licensing permits for the mine. How do we as a community get hold of these permits so that we can hold the mine to account for its negative impacts?		Lesedi Community	16/07/2020	Focus Group Meeting	The EIA Report will be made available, as well as the report associated with the Water Use Licence Application. The public therefore will be provided the opportunity to review Digby Well's reports before these reports are submitted to government. Once a licence or authorisation is issued by a government department, all registered I&APs will be informed. If any I&AP

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						disagrees with the outcome or decision of a department, the decision can be appealed.
Understand the background of the proposed site.	Mining companies wanting to work in the area should seek to understand our history.	L Molefe (Ward Committee Representative)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted
Unlawful relocation of graves	One of the mines in the area relocated people's graves (about 15 graves) without any notifications given to the population or compensation. The mine then changed its name when people started questioning what happened to their graves and it was eventually sold. So Universal should not do the		Lesedi Community	16/07/2020	Focus Group Meeting	Noted

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	same.					
Request for consultation	We used to work and live full time on some of these farms, and we buried our people in some of them; thus, we need to be consulted if there are graves that will be affected. Which farms will be affected by the project, are there any graves on the site?	J Nkoati (Representative from the Chief)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted, the project affected farms are Dalyshope and Klaarwater. These are owned by Anglo Coal. The cultural heritage specialist report will provide more information regarding the presence or lack thereof graves and how they will be affected.
The upskilling of the community	Most middle-aged people in the community have only primary schooling as there were no secondary schools in the area. How does Universal plan to upskill such people so that they can take up employment opportunities with the mine?	L Molefe (Ward Committee Representative)	Lesedi Community	16/07/2020	Focus Group Meeting	This matter will be fully investigated in the social impact assessment study. Also, targets for training and capacity building for the community will be outlined in the mine's SLP which has been submitted to DMR for review and comment. The SLP will also be a public document so you will be able to hold Universal to account on non-delivery.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Water Issues	We understand that water and transportation of the coal from the area is still a challenge for the project. Our advice to Universal is to process the coal elsewhere - the newly opened mine in the area mines then transports the coal to Witbank for processing.		Lesedi Community	16/07/2020	Focus Group Meeting	This not practical, Dalyshope is in Lephalale, to transport the coal to Witbank is uneconomical. During the feasibility study, methods will be investigated to reduce water consumption, such as filtration of tailing streams and recycling of water. In addition, the erection of fully enclosed water storage tanks to minimise the evaporation of water will be considered.
Royalties	Have you heard about royalties? Can Universal consider paying the community royalties instead of implementing SLP programs as the municipality will never allow infrastructure development in the area?		Lesedi Community	16/07/2020	Focus Group Meeting	Noted, we will share your suggestion with Universal.
Relocation	Universal should be aware that the Lesedi community is not interested in being relocated regardless of the project impacts. Our people will never be able to afford	D. Majapholo (Community Rights Defender)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	to live in a township situation.					
Project Impacts	How will influx related impacts be managed?		Lesedi Community	16/07/2020	Focus Group Meeting	The matter will be addressed as part of the social impact assessment study.
Local Business	What can we do to ensure that our locally registered companies are offered procurement contracts?		Lesedi Community	16/07/2020	Focus Group Meeting	Apply for tenders, attend tender meetings and make sure that you present all the requested information on your proposal. Before universal starts its operations, attend some tender clarification meetings for another mine in order to familiarise yourselves with the processes, attend any training offered by business incubator agencies such as SEDA; draft your business plan so that you can qualify for some government funding, etc
Meeting Invite	Whenever you are planning to hold a meeting here, make sure you invite the Chief's representative that reside in the community as he was not invited to the previous meetings		Lesedi Community	16/07/2020	Focus Group Meeting	Noted with thanks. We were not aware there is the residing chief in the area.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Vote of thanks.	Thank you for involving the community in the proposed project, the community appreciate your efforts and initiatives. Keep us posted with all the developments (Chief's Representative).	J Nkinati (Community Member)	Lesedi Community	16/07/2020	Focus Group Meeting	Thank you, all developments will be communicated with the community.
Socio-economic	Will the project proceed?	Tharina Pelsler	Landowner	16/07/2020	Focus Group Meeting	From a legal perspective, the Applicant is required to have all the necessary licences and authorisations in place for the project to proceed. This process will take approximately a year to finalise. If approved the Applicant is usually provided a period of time to implement the project, and if mining activities do not commence within that timeframe, the authorisation will lapse.
Traffic	<ol style="list-style-type: none"> With regards to the road upgrade, will the road be tarred? The roads to Stockpoort and Steenbokpan have been damaged by trucks. If the project goes ahead, to what extent will the 					<ol style="list-style-type: none"> The design of the roads will be done in conjunction with the Provincial Roads Department following a Traffic Impact assessment. The recommendations of the Provincial Roads Department will be implemented A traffic impact assessment will be undertaken during the EIA

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	surrounding road networks be impacted?					Phase to determine the impact coal trucks from this operation will have on the surrounding road network.
Groundwater	The borehole on the Farm Canada has dried out. Will there be enough water for this project and how will this impact surrounding land users?					As part of the Groundwater Impact Assessment, the effect on groundwater as a result of the mining operation will be modelled. It is unclear at this stage where the operation will get water from but several options must be investigated. If the project does rely on borehole water, the resource boreholes will need to be included in the model to predict the zone of influence.
Blasting	What impact will blasting have on boreholes and structures?					A Blast Impact Assessment will be conducted as part of the EIA Phase. This will record all structures within the specified blast radius and determine to what level these structures will be impacted, if at all.
Visual	How close can the rock dumps come to the fence? We are concerned about dust being blown off of these dumps.					Thank you for the comment. It has been noted and will be addressed during the EIA phase.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Visual	What is the long-term plan for the discard dump? And will they use topsoil to cover the dumps?					Discard or residue will be back filled into the pit or boxcut. The pit in turn will be rehabilitated upon closure.
Water	Can the mine abstract water from the Limpopo?					Although it is possible, this will be an unlikely option for the mine. The Limpopo is a shared resource with Botswana which requires international agreements to be in place, as well as permission to do so. Other water source options will be investigated before abstraction from the Limpopo is considered.
Socio-economic	Where will the mine staff live and how will they be transported?					The staff will be required to get their own accommodation in town or surrounding areas. Transport to and from the mine will be provided from designated points.
Socio-economic & Visual (sense of place)	We are concerned that we won't be able to attract foreign hunters to our lodge with a coal mine next door. We rely on international travellers to generate enough income to survive.					A Visual Impact Assessment will be undertaken during the EIA Phase to determine to what extent neighbouring farms will be visually exposed to mining activities. A Noise Impact Assessment and Blasting Impact Assessment will determine to what extent neighbouring farms will be exposed to noise and

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						vibrations.
Life of Mine	Aren't there coal reserves to the north of Klaarwater? Will they mine these reserves after this pit is fully mined?					OC1 has a life of approximately 20 to 25 years. Should the Applicant want to mine any other reserve not contained in this application, the Applicant will need to apply to do so and undertake the necessary environmental investigations.
Socio-economic & Visual (sense of place)	If the mining area expands, it's better for the mine to buy the farm than to live next to a mine.					A Visual Impact Assessment will be undertaken during the EIA Phase to determine to what extent neighbouring farms will be visually exposed to mining activities. This application will only consider the current mine plan, and should the mine plan change or be expanded, the impacts of the changes will need to be assessed.
Socio-economic	What is the market for the coal to be mined?	Piet Nel	Landowner	17/07/2020	Focus Group Meeting	The market is currently Eskom/local
Visual	What kind of visual barriers will be in place to prevent neighbouring farms from					A Visual Impact Assessment will be undertaken during the EIA Phase and will determine to what extent

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	being exposed to the mine?					neighbouring farms or road users will be affected.
Socio-economic	What is the project timeline?					The Application process will take approximately two years. Once all the necessary licences and authorisations are in place, the Applicant can commence with construction.
Groundwater & Cumulative impacts	<p>This project will deplete all groundwater in the area. There are so many approved mining projects on the surrounding farms, that all these operations will deplete our groundwater resources.</p> <p>These mining companies must be held liable and a regional study must be undertaken to understand the far-reaching implications to groundwater and farming.</p>					A Groundwater Impact Assessment, which will also consider cumulative impacts, will be undertaken in the EIA Phase.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Socio-economic & Visual	We can't hunt with an operational mine next door. We will lose international hunting clients.					A Visual Impact Assessment will be undertaken during the EIA Phase and will determine to what extent neighbouring farms or road users will be affected.
Groundwater	The environmental baseline needs to be done accurately to assess the actual impact of the project to groundwater.					A hydrocensus has been undertaken and the environmental baseline will be provided in the Groundwater Report and summarised in the EIA Report which will be made available for comment.
Security	How will Universal Coal keep their employees out of neighbouring farms?					All necessary security measures will be implemented on the mine. Strict access control into and exiting the mine will be implemented. All mine personnel will be issued with ID cards and be required to carry these ID cards.
Public participation	We prefer smaller meetings to large public meetings, as not everyone gets a chance to speak during large meetings.	Louw Swanepoel & Dewald de Beer	Landowner & attorney	17/07/2020	Focus Group Meeting	Due to Covid-19, Digby Wells is taking necessary precautions to avoid gathering groups of people. We will most likely conduct face-to-face meetings with essential stakeholder during the EIA Phase.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Blasting	Ho will neighbouring farms be impacted by blasting, especially the wildlife because it may scare the animals.					A Blast Impact Assessment will be conducted during the EIA Phase and will determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring farms will be affected.
Security	How will Anglo maintain the boundary fences?					Boundary fences will be inspected on a regular basis, generally daily but could be longer, to ensure no breaches. If a breach is detected during inspection the breach is mended as soon as possible.
Groundwater	We are dependent on boreholes for water on the farm. We have four boreholes on the farm, one of which is very close to the Dalyshope.					Thank you for the information. Digby Wells will consider this during the EIA Phase. GPS co-ordinates for the boreholes have been requested.
Traffic	The roads are in a bad condition in the area and haul trucks will cause the roads to further deteriorate.					A Traffic Impact Assessment will be undertaken during the EIA Phase which will consider the impacts to the surrounding road network.
Noise and Blasting	Will the mine blast and how will they blast so that the noise doesn't affect the neighbouring farms?					A Blast Impact Assessment will be conducted during the EIA Phase and will determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring farms

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						will be affected.
Blasting	Houses and dams have already been affected by the existing mines in the area.					The Blast Impact Assessment will consider all structures in the surrounding blast radius and determine to what extent these structures may be affected. The mine must also keep a record of structures and should a neighbouring landowner believe the mine has affected their property, the mine must investigate.
Environmental Legal Process	Do impact studies happen before or after mining starts?					The specialist impact assessments are required as part of the Environmental Authorisation application process. Generally, a mine requires at least three authorisations/licences before they are allowed to operate. These include: <ul style="list-style-type: none"> • Mining Right in terms of the MPRDA; • Environmental Authorisation in terms of NEMA; and • Water Use Licence in terms of the NWA.



Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Socio-economic	<p>We farmers have been waiting for years to have confirmation whether the project will proceed or not. We need time to plan our future. We already face difficulties with financial planning with factors like draught. We need to know if Anglo plans to buy these farms so we can plan for our future.</p> <p>By not proceeding, Anglo is holding up development in the area in some respects. We need to know and be informed of what is going on. We need to prepare.</p>					<p>Only land required for mining activity will be purchased and negotiations will be held with those individual landowners at the appropriate time. Landowners should proceed with normal activities until they are approached by an authorised mine representative.</p>
Cumulative impacts	<p>Will Digby Wells consider the impact to surrounding farms? We've had so many specialists on our farm over the years so we hope this information will be used to provide an accurate impact from the project to the area.</p>					<p>Digby Wells looks at various aspect (ie, soil, water, social, air quality, etc) and determine how the mine infrastructure will impact the natural and social environment and must determine the extent of the impact. During the specialist site inspections, each specialists identified the various farms in</p>

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						the area which they wanted to survey, so the project impact is not necessarily focused on Klarrwater and Dalyshope. Older studies can be referenced; however, it must be noted that the environment is ever-changing and older data may no longer be relevant. As part of this process, each specialist must consider cumulative impacts for their respective field of expertise. The older studies can be utilised for this purpose.
Mine infrastructure	Is there coal beneath the plant area?					No, the infrastructure layout considered the coal deposits in the area, and place infrastructure in such a way to avoid sterilising coal reserves.
How do you think the project might (affect) you?	The proposed mine is in an area of very high importance to free roaming cheetah (a naturally protected species), who would be impacted by the development of the mine and the associated infrastructure- which will also impact other species of fauna and flora.	Ashleigh Dare	The Endangered Wildlife Trust	24-Jul-20	Registration and Comment sheet	Although the mining right extends over many farm portions, this application and related mining activities will only take place on Dalyshope and Klaarwater. These two farms are used for grazing, cattle breeding and hunting. Should the Applicant wish to expand mining activities beyond this scope, additional studies and applications must be undertaken. A protected tree assessment is being

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						undertaken on Klaarwater and Dalyshope, and a Fauna and Flora Impact Assessment will also form part of the EIA Phase.
Project impacts on socio-economic conditions (e.g. livelihoods, farms, business, household)	Fauna and Flora. We are greatly concerned about the resultant habitat destruction, movement barriers and wildlife vehicle collisions that will occur. From a socio-economic perspective we are concerned about the loss of ecosystem services.					The protected tree assessment pertains to identifying protected trees and applying to relocate these trees from the impacted mining area to preserve the. Ecosystem services must be considered in the EIA Phase by the relevant specialists.
How can these impacts be managed, avoided or fixed?	The impacts can be avoided by not mining the area.					The “No-go” alternative, preserving the status quo, must also be considered and presented in the EIA Report.
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?	Detailed above. This area is of high importance to free roaming cheetah (a listed species in the TOPS list, listing un vulnerable). Further this Coal Mine could impact on the water					Thank you, these concerns will be considered in the EIA Phase.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	of the Limpopo River.					
Where are these found?	Both occur naturally within the proposed mining area.					Noted. Thank you for this information.
General comments	Risks related to cheetah, the Limpopo River, and other species of fauna and flora, which may be impacted by the infrastructure development (including but not limited to habitat degradation, fragmentation, movement barriers, and collisions with vehicles) must be fully considered and addressed.					The specialist impact assessment, as mentioned, will be undertaken in the EIA Phase, and the identified impacts will be considered.
How do you think the project might impact (affect) you?	The project might assist the Leseding community with the necessary interventions to classify the area as a formal settlement.	Ditiro Jan Majapholo	Community Member	24-Jul-20	Registration and Comment sheet	The determination of a formal settlement is the responsibility of the municipality and therefore these concerns must be raised with the local municipality and directed through the correct channels of communication.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
How do you think the project might (affect) you?	The project has the potential to contaminate the soil and air quality in the area which might negatively impact on agricultural activities and the wellbeing of the community. Wildlife will also be impacted as the project will contribute to habitat destruction.					Thank you for your comments. Air quality, soils and wildlife impacts will be assessed during the EIA Phase.
How can these impacts be managed, avoided or fixed?	By following all relevant legislations pertaining to mining and the environment. The project team should continuously involve and engage with the local community.					Your details have been captured in the Stakeholder database for the environmental-legal application processes and you will continue to receive communications for the remainder of the Project. During the EIA Phase, further public consultation will be undertaken and therefore further opportunity exists to provide comments into this environmental process.
Do you think the project could impact (affect) infrastructure you might have? (e.g. houses,	Increased traffic and potholes on roads. Infrastructures more especially farmhouses will hugely be impacted by the					A traffic Impact Assessment will be undertaken during the EIA Phase which will consider the impacts to the surrounding road network. A Blast Impact Assessment will be conducted during the EIA Phase and will

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
buildings, roads)	blasting					determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring structures will be affected.
If so, how can these impacts (affects) be managed, avoided or fixed?	Construction of new roads and maintenance of the current Steenbokpan road					The Applicant is proposing to upgrade the access road to accommodate the haul trucks.
	Farm owners should be involved in decision-making regarding infrastructures in the vicinity of the mining area					All directly affected landowners are being consulted and will continue to be consulted throughout the environmental legal application process.
	The local community should be given first preference when awarding business tenders					The mine must consider local work force and services should local businesses be capable of providing the required services.
	The community, more especially women and youth should be given the necessary training before the mining activities can begin					This operation will be a contractor operation, meaning the staff requirements will be provided by a mining contractor. Any new opportunities that can be provided to the local communities must consider training and hiring from the community.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	The mining company should collaborate with the local municipality to build schools and houses for the community					The Applicant has submitted a Social and Labour Plan which has been negotiated with the local community, the municipality and the DMRE.
	Focus should be given to youth organisations in educating and improving the lives of the local youth					
	The local community should be given first preference when coming to permanent employment					This operation will be a contractor operation, meaning the staff requirements will be provided by a mining contractor. Any new opportunities that can be provided to the local communities must consider training and hiring from the community.
	The mine is responsible for all the environmental liabilities in terms of the 'Duty of Care' principle.					Yes, should the application be approved, and mining proceed, the duty of care will be the responsibility of the mine.

10 Item 2(i): The environmental attributes associated with the sites

This section comprises the baseline environment of the proposed Project area as assessed by the relevant specialists. This includes the features of the environment on site and land use which is expected to be affected by the proposed Project.

Digby Wells undertook specialist investigations in 2013/2014 when Anglo first considered this project. The project was referred to as the Dalyshope (Phase 1) Coal Mine. This data collected by Digby Wells has also assisted in informing the environmental baseline conditions of the site.

10.1 Climate

The Mining Right area falls within the Northern Arid Bushveld climatic region, which is characterised by warm, wet summers and dry winters. Summer temperatures can reach a maximum average of 33°C between November and February, which drops to a minimum average temperature of 5°C during the winter months of June and July. Frost is infrequent in the area. The area is further characterised as generally low lying, dry to arid, hot region with altitudes ranging from 300 – 1100 m above mean sea level (mamsl).

Rainfall occurs predominantly during the summer months (November and December) with a Mean Annual Precipitation (MAP) of 438 mm (WRC, 2015), which is likely to be distributed as indicated in Figure 10-1. The 90th percentile of the wettest month (January) is 145 mm while the 10th percentile is indicated to be 30 mm for the same month. This implies that this region generally receives low to moderate rainfall during the rainy season. The Mean Annual Evaporation (MAE) (1 950 mm) (WRC, 2015) is much higher than the MAP (438 mm) for the area, which indicates a region characterised by distinct dry and wet seasons with a negative natural water balance. The monthly distribution of potential evaporation and rainfall can be seen in Figure 10-2.

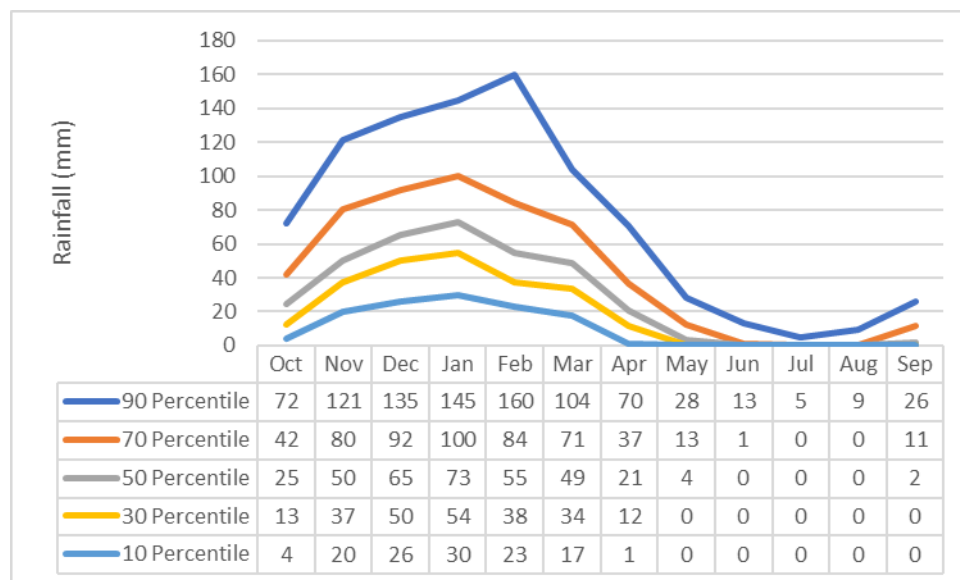


Figure 10-1: Monthly Rainfall Distribution for the Project Area

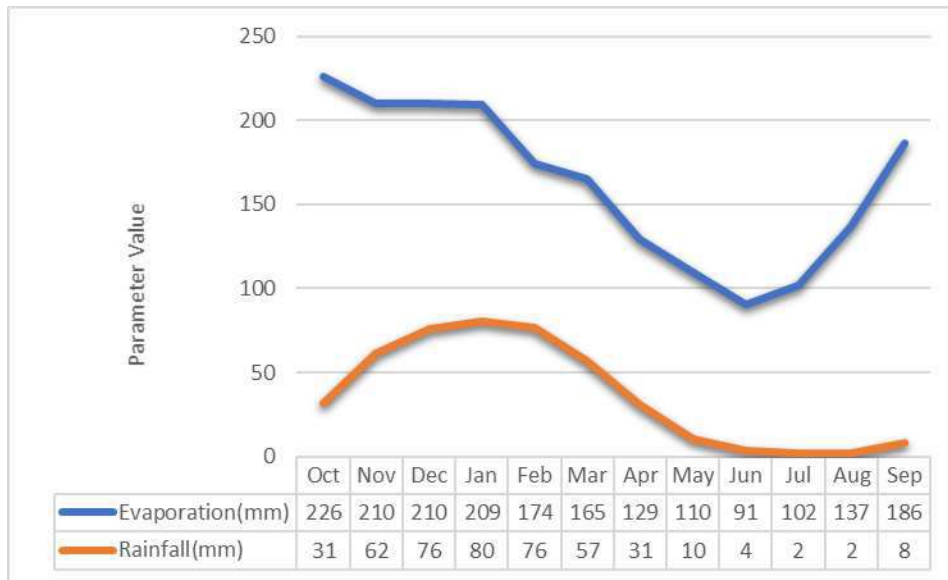


Figure 10-2: Monthly Evaporation and Rainfall for the Project Area

The Mean Annual Runoff (MAR) depth for the area was calculated to be 3.4 mm. This runoff accounts for approximately 0.8% of the MAP for the area. The 90th and 10th percentile runoff during the wettest month of December is 1.2 mm and 0 mm, respectively. Owing to considerable antecedent soil moisture conditions in the following month of January, the 90th percentile value increases to 1.6 mm, while no change occurs in the 10th percentile (Figure 10-3).

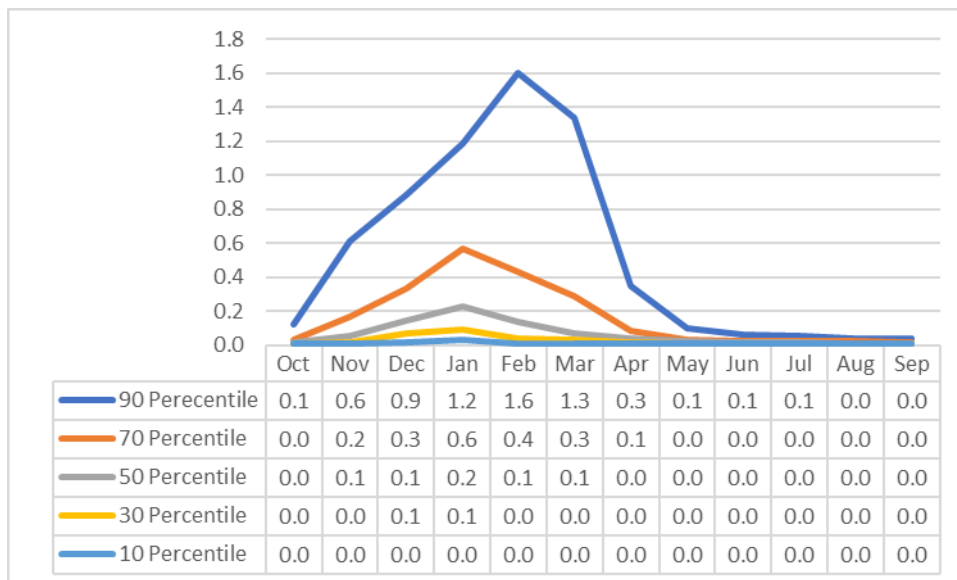


Figure 10-3: Monthly Runoff Distribution for the Project Area



10.2 Topography and Drainage

The topography of the Project area is comprised of flat plains with a gentle slope (between 0° and 2°) towards the Limpopo River (Figure 10-4). The elevation range varies from 883 mamsl to 825 mamsl at the Limpopo River.

The main drainage system in the vicinity of the Project area is the Limpopo River, which also forms the border with Botswana. Topographic maps and aerial imagery available for the Project area indicate that there are no other perennial or non-perennial streams located near the Project area. However, there are numerous non-perennial pans, which receive surface water runoff.

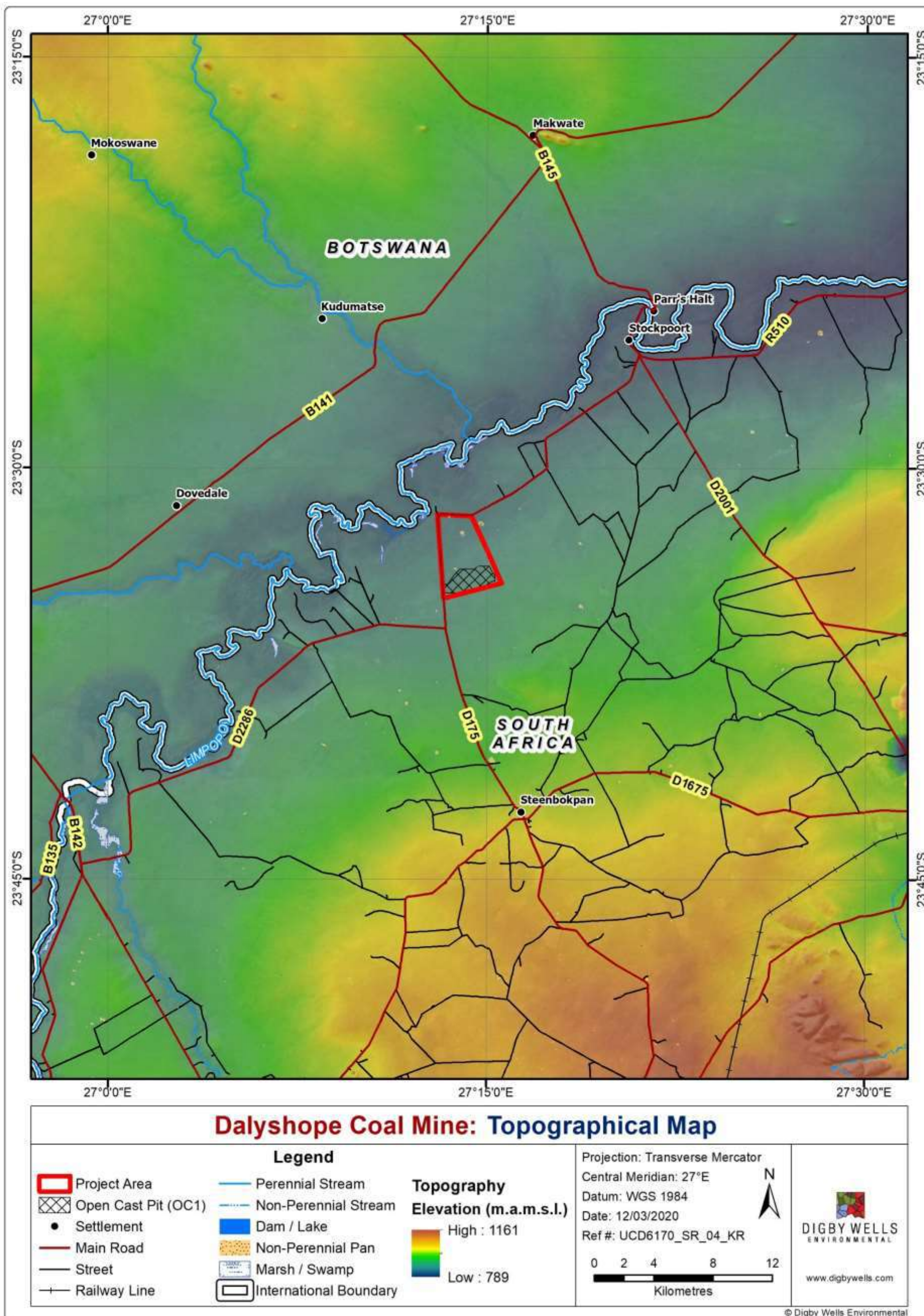


Figure 10-4: Topographic Map of the Project Area

10.3 Geology

This section identifies and discusses the regional and site-specific geology.

10.3.1 Regional Geology

The coal resources of South Africa are hosted within the Karoo Supergroup, which have been divided into 19 coal fields. The coal extracted from the Karoo Supergroup has significant differences in grade, type, rank, lateral extent and thickness which are dependent on the variations in depositional environments, climate, plant communities and structural disturbances of the various coal fields (Johnson *et al.*, 2006).

The coal resource of the Project is located in the Swartrant and Grootegeluk Formations of the Ellisras Basin (Universal Coal, 2020). The depositional environment of this basin is accepted to be a meandering river and floodplain environment with repeat flooding and crevasse splays causing the rapid alternation between coal and mudstone lithologies (Johnson *et al.*, 2006).

The main structural disturbances to the Karoo Supergroup are associated with the intrusion of dolerite dykes and sills, which displace, replace and devolatilise the coal resource (Johnson *et al.*, 2006). There are no dolerite exposures mapped on the 1:250 000 geological map of the Ellisras Basin (Figure 10-5), however, the Ellisras Basin is bounded by the east-west orientated Eenzaamheid (southern boundary) and Zoetfontein (northern boundary) faults and north-west-south-east orientated Daarby (eastern boundary) fault with extensive minor faulting and magnetic lineaments present within the Ellisras Basin itself.

10.3.2 Site-specific Geology

The coal seams of the Swartrant Formation comprise of three distinct seams varying in thickness from 0.5 m to 8 m, which are separated by sandstone, siltstone and mudstone interburden (Universal Coal, 2020).

Overlying the Swartrant Formation, the Grootegeluk Formation is considered to be the economically important formation in the Ellisras Basin, containing several, relatively thick coal seams, totalling an approximate 80 m thick deposit, which is interbedded with mudstones. For this proposed Project, the top of the coal seam is approximately 20 meters below ground level (mbgl) (Universal Coal, 2020).

The Eendragtpan Formation overlies the Grootegeluk Formation in the Project area as mapped on the 1:250 000 geological map. This formation comprises entirely of variegated mudstones (Johnson *et al.*, 2006). The weathering profile extends to a depth of 15 mbgl. Calcrete formation is commonly found in drainage channels and small pans as a result of the arid bushveld climate (Universal Coal, 2020).

Exploration drilling has intersected very little dolerite in the proposed resource and seismic surveys indicate the presence of faults are few and small (less than 5 m throws) (Universal Coal, 2020).

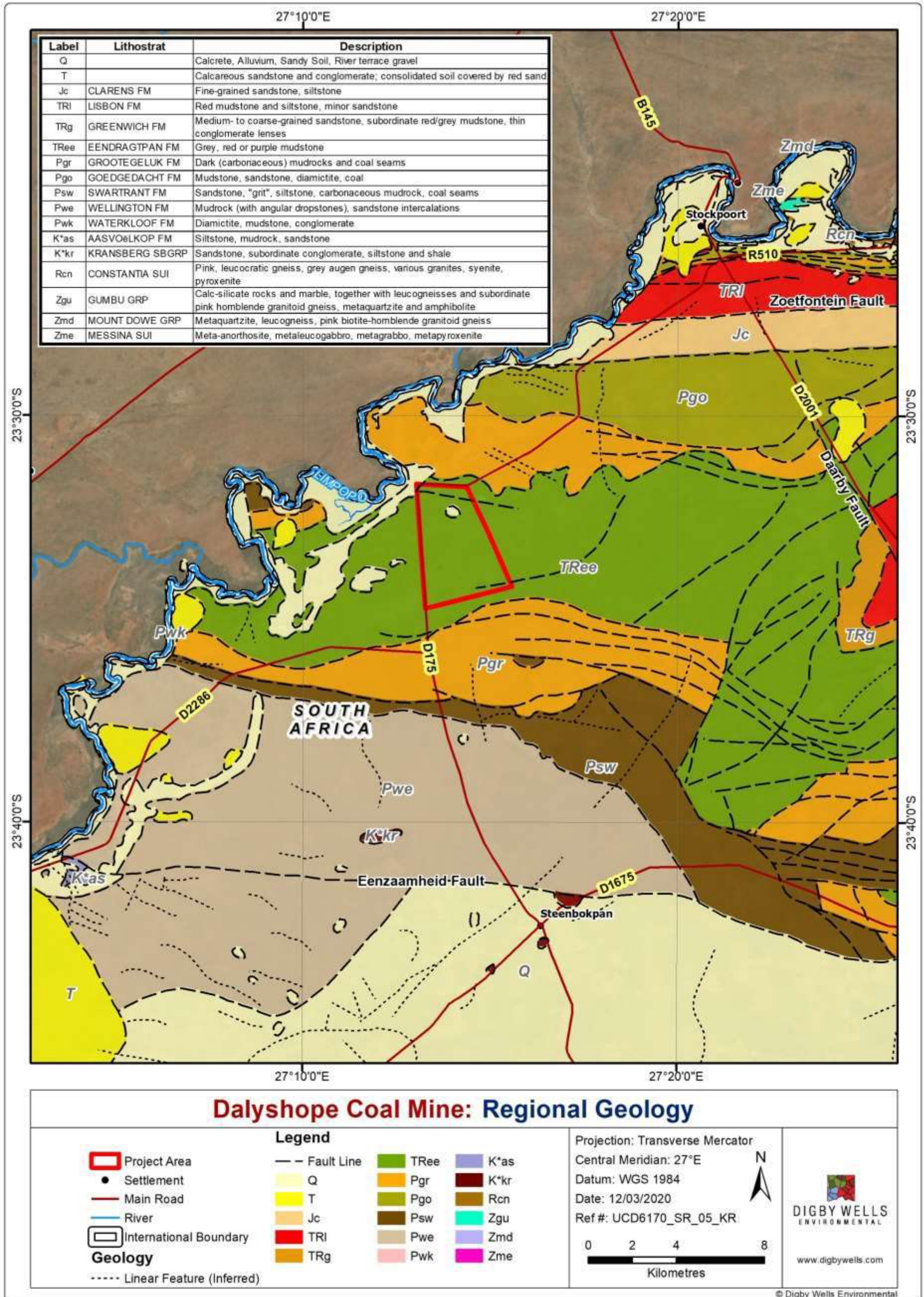


Figure 10-5: Regional Geology

10.3.3 Geochemistry

Pyrite is commonly associated with coal deposits, which when exposed to oxidising conditions will result in the formation of Acid Mine Drainage (AMD). AMD is an acid (low pH) water which contains high levels of metals and has a detrimental impact to ecosystems and human health. Previous geochemical analyses have identified pyrite as being present in the proposed Project resource.

Geochemical analyses have been completed on waste, coal and ash samples for the Dalyshope resource to which the following conclusions were drawn:

- Waste Rock Material:
 - Variable potential for acid generation with samples ranging from Type I (acid generating) to Type III (non-acid generating) categories;
 - Pyrite was observed in all waste samples;
 - Leachable elements of concern include fluoride, aluminium, iron, nickel, strontium and manganese; and
 - It is recommended that waste rock material be managed and deposited to allow a natural geo-liner to be formed with the non-potentially acid generating material to buffer the acid generating material.
- Coal Material:
 - Variable potential for acid generation, however, majority of the samples are acid generating;
 - Contains high pyrite and siderite inclusions resulting in a high sulphur content for all samples;
 - Trace elements which are elevated in comparison to the continental crust averages include arsenic, barium, copper, nickel, strontium and uranium;
 - Leachable elements of concern include boron, fluoride, rubidium, selenium and silicon; and
 - It was recommended that stockpile standing times be kept for as short a timeframe as possible with storm water management plans implemented on site to reduce and manage the potential AMD.

10.4 Groundwater

10.4.1 Local and Regional Aquifers

The Karoo Supergroup sediments associated with the Ellisras Basin generally have a recharge coefficient of 0.7% of MAP (equating to approximately 3 mm/a). The local geology defines the following aquifers for the Project area (Digby Wells, 2014):

Unconfined alluvial aquifer associated with the Limpopo River: Groundwater is temporarily stored in this aquifer allowing recharge to the underlying fractured rock aquifer. Surface water interactions take place within the unconfined alluvial aquifer. As the Limpopo River is also defined as the border between Botswana and South Africa, contamination and dewatering impacts to this aquifer could have international consequences.

Fractured aquitard (meaning a zone that restricts the flow of groundwater from one aquifer to another) associated with the Grootegeluk Formation lithologies: The aquifer comprises shale and mudstone lithologies. Groundwater flow and storage occurs predominantly along fractures and fissures, which act as preferred pathways for groundwater flow. High yielding fractures and fissures can be intersected in this aquifer but unless this is associated with a high recharge feature (i.e. perennial river) storage volume could be poor and limited.

Permeable aquifer associated with the coal seams: Water associated with this aquifer is generally of poor quality due to the presence of sulphates occurring within the coal seams. Coal seams typically have a slightly higher conductivity rate in comparison to the mudstone lithologies and can therefore yield higher volumes of water.

Deep fractured aquifer associated with the Swartrant Formation lithologies: The aquifer comprises of sandstone lithologies. Groundwater storage is within pore space and yield is defined by the size and interconnectivity of pore spaces, which results in low yielding boreholes.

Dolerite intersections were not identified during the previous hydrogeological drilling programme; however, its presence is mentioned in the project description provided by Universal. Dolerite is associated with very low permeabilities limiting or preventing the flow of groundwater through this lithological unit and are known as aquicludes. Aquicludes are important in controlling the groundwater flow and aquifer characteristics in overlying and underlying aquifers.

10.4.1.1 Previous Investigation Results

As part of the Dalyshope (Phase 1) Coal Mine and Vedanta IPP hydrogeological assessments, 11 boreholes were drilled and 29 boreholes were aquifer tested (Figure 10-6).

The 11 boreholes intersected mudstone, shale, sandstone and coal lithologies, with eight boreholes measuring water strikes with blow yields estimating between 612 l/hr to 10 404 l/hr. Water strike depths ranged from 8 mbgl to 107 mbgl, with 10 mbgl occurring as the most frequent water strike depth. The shallow water strikes predominantly yielded seepage water. The higher yielding (deeper water strikes) are associated with lithological contacts and potential linear fracture features. No water strikes were identified below a depth of 107 m (where drilling extended to depths of 150 m and 300 m) (Digby Wells, 2014a and 2014b).

Static water levels varied between 8 mbgl to 20 mbgl. Majority of the static water level measurements indicate confined aquifer characteristics are present at the Project area, which are attributed to the presence of aquitards (as a result of thick mudstones sequences,



at shallow depths). Only the boreholes which intersect the alluvial aquifer display unconfined aquifer characteristics (Digby Wells, 2014a and 2014b).

The aquifer testing results indicate that the boreholes in the Project area have low borehole yields, with fast drawdown in water levels and slow recoveries. Boreholes which intersect the alluvial aquifer (Limpopo River) attained the highest yields. The average transmissivity values calculated from the recovery data was $0.93 \text{ m}^2/\text{d}$ (Digby Wells, 2014a and 2014b).

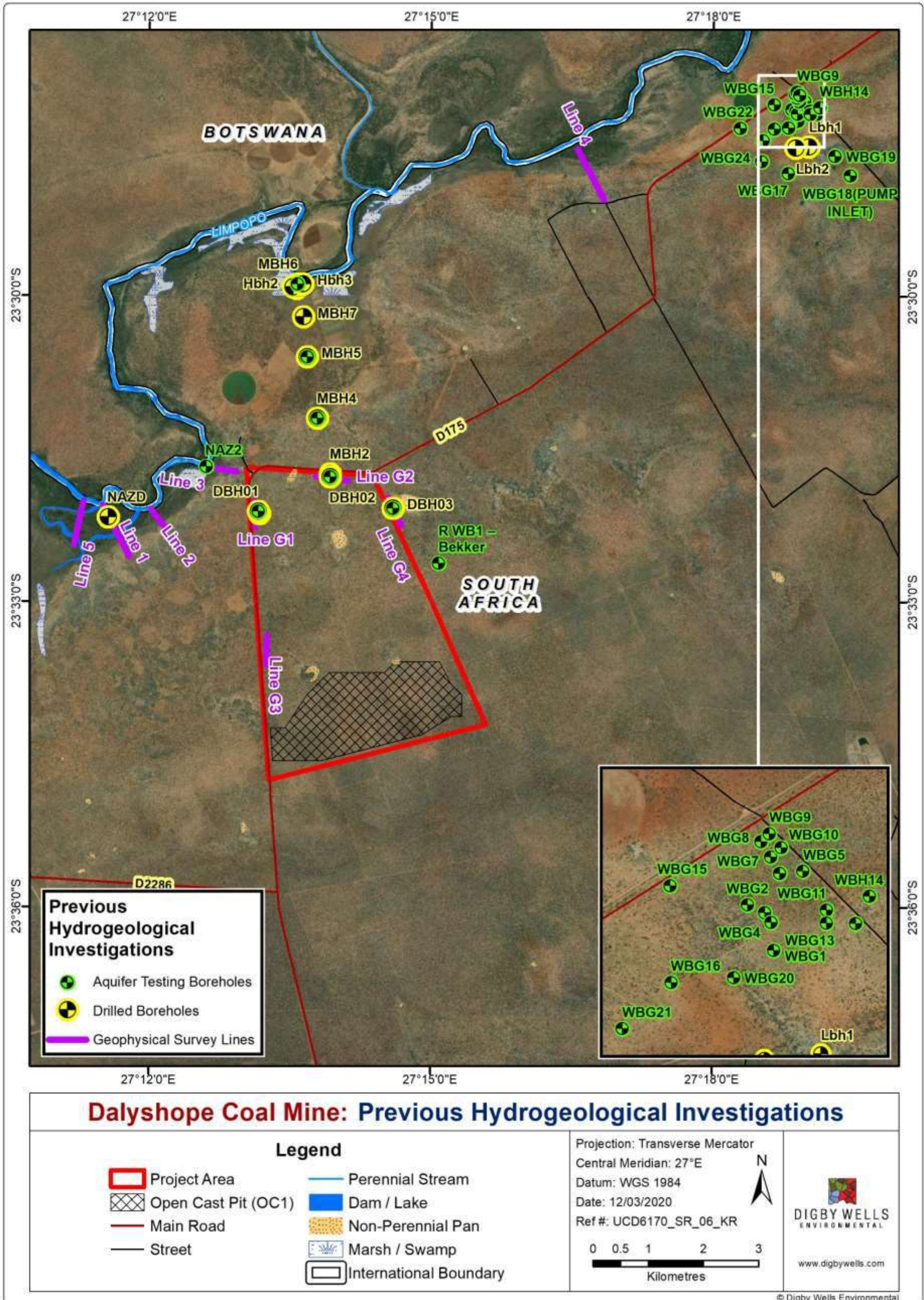


Figure 10-6: Previous Hydrogeological Investigations

10.4.2 Hydrocensus Survey

Digby Wells undertook a hydrocensus survey during 2012 for the Dalyshope (Phase 1) Coal Mine and hydrogeological assessments on the farms Klaarwater 231 LQ and Dalyshope 232 LQ. The 2012 hydrocensus identified 56 boreholes and one surface water location, the Limpopo River. Groundwater use varied between water supply (domestic, gardening, game and stock watering) and exploration / monitoring purposes as well as no use.

An updated hydrocensus was conducted between 17 and 20 February 2020, which identified 32 boreholes within a 1 km to 2 km radius of the Dalyshope Coal Mining Project area (Figure 10-7). Borehole use varied between water supply (domestic and livestock watering) and exploration / monitoring purposes.

10.4.2.1 Water Levels

Water levels measured during the 2020 hydrocensus vary between 5.6 mbgl to 24.6 mbgl, with an average of 16.2 mbgl (829 mamsl). The groundwater levels measured during the 2012 hydrocensus had an average of 13.3 mbgl (823 mamsl) and varied between 5.3 mbgl to 19.7 mbgl, which is consistent with what has currently been measured (minor differences could be attributed to GPS elevation errors and season variations). Water level trends between 2012 and 2020 are provided in Figure 10-8. Only three boreholes share water level data between these hydrocensus surveys:

- MBH2 indicates little to no change in water levels between the two hydrocensus surveys.
- NAZ2 indicates a general decreasing trend in water levels since 2012.
- NAZ5 indicates an overall increase in water levels since 2012.

NAZ2 and NAZ5 are water supply boreholes, so the fluctuation in water levels in these boreholes between 2012 and 2020 can be attributed to abstraction purposes. MBH2 is an exploration / monitoring borehole where no abstraction is undertaken and therefore indicates little to no change in the water table for this location.

There is an 84% correlation between the water table elevation and topography (Figure 10-9), based on 22 water level measurements, which indicates that groundwater flow will typically follow surface topography. This confirms what was observed from the 2014 hydrocensus water level interpretation, which was a 94% correlation based on 40 water level measurements. The difference in correlation between the 2012 and 2020 surveys is attributed variation in measured boreholes and therefore the intersected aquifers. Groundwater flow would therefore be towards the Limpopo River.

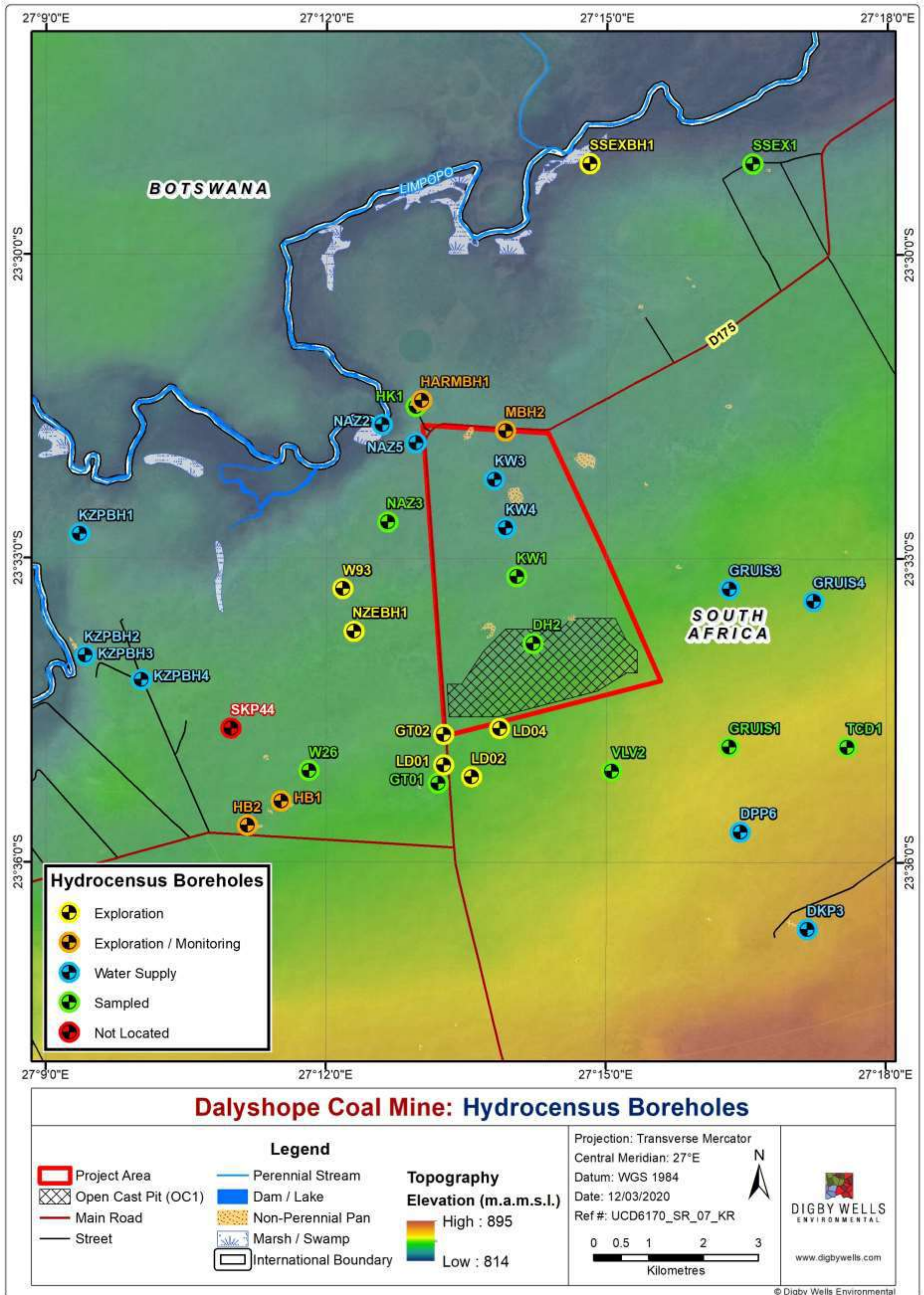


Figure 10-7: Hydrocensus Sample Locations

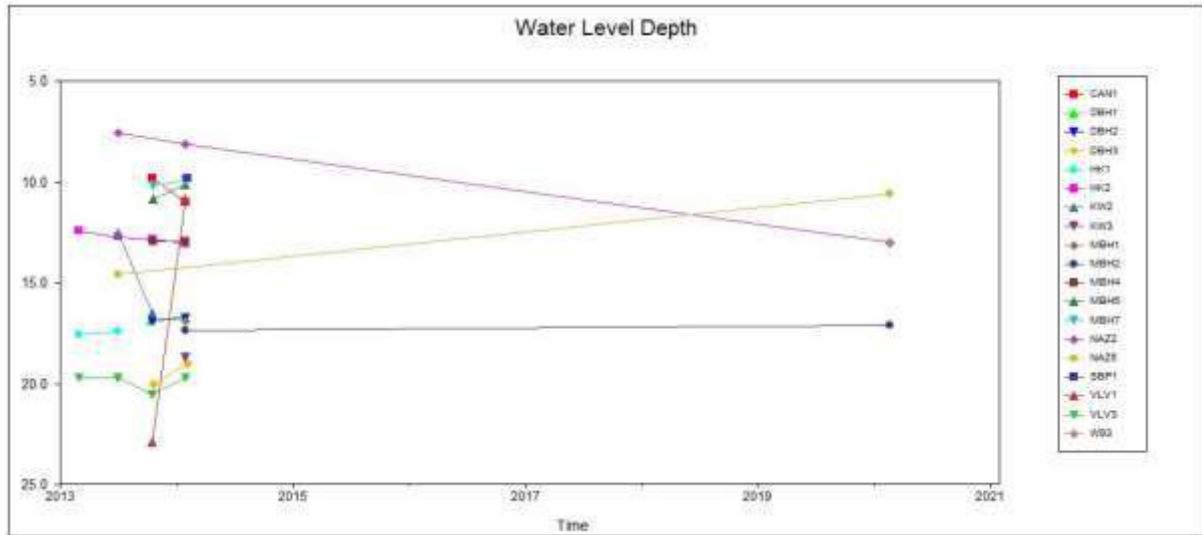


Figure 10-8: 2020 Water Level Trends

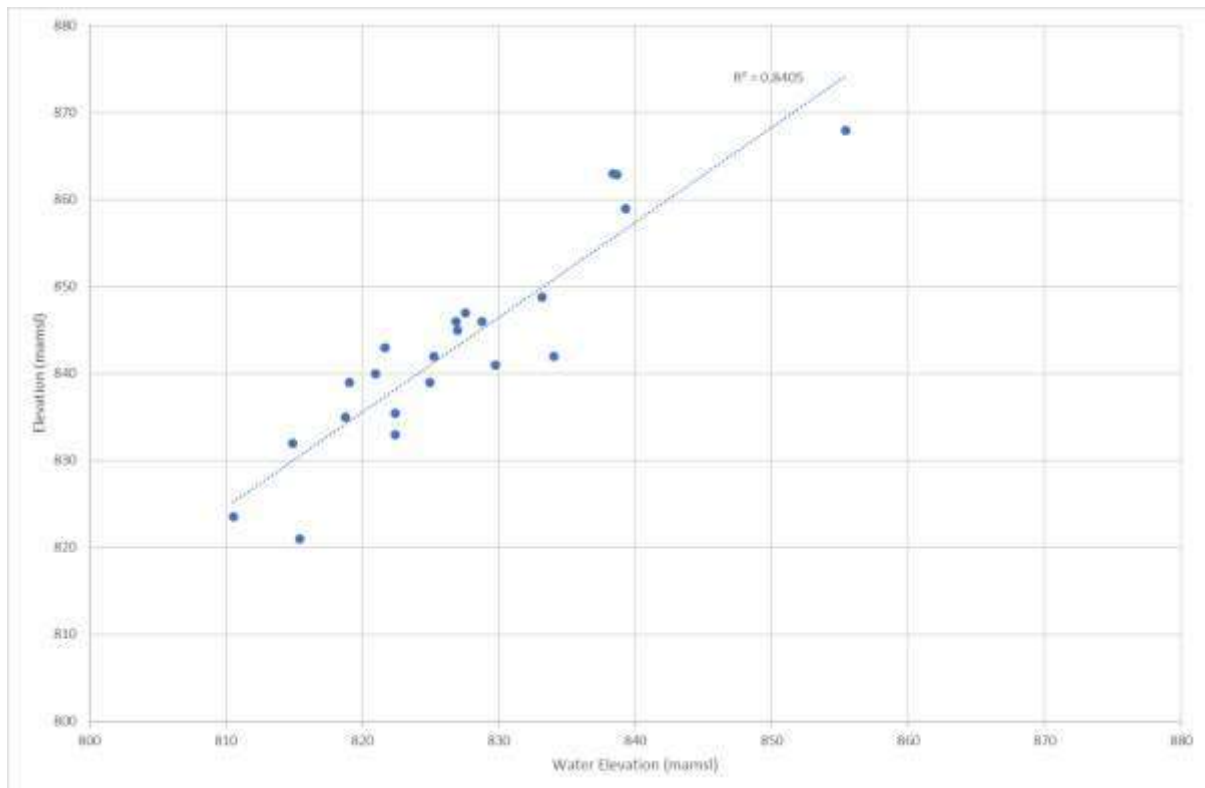


Figure 10-9: Water Level Correlation

10.4.2.2 Water Qualities

Ten hydrocensus water samples were submitted to Waterlab Laboratory (a SANAS accredited laboratory) on 21 February 2020. The results will be available for the EIA Phase. pH, electrical conductivity and salinity field parameters were measured during the hydrocensus and are summarised as follows:

- pH levels are neutral varying between 6.0 and 9.2;
- Electrical conductivities vary between 81 mS/m to 174 mS/m, with an average of 1.15 mS/cm; and
- Salinity levels vary between 400 ppm to 900 ppm, with an average of 600 ppm. The field parameters indicate the groundwater is representative of freshwater (freshwater is represented by salinities of less than 1000 ppm).

10.5 Hydrology (Surface Water)

The proposed Project area falls within primary drainage region A of the Limpopo WMA and the A41E quaternary catchment, Sub-Quaternary Reach (SQR) A41E-00126 (Limpopo River) (Figure 10-10). The A41E catchment has an aerial extent of 1,938 km², which contains an endorheic region (an area that does not contribute surface water flow to river systems). Based on the current outputs of the National Freshwater Ecosystem Priority Areas (NFEPA) project (Nel *et al.*, 2011), there are no areas of potential concern within the sub-quaternary catchment associated with the proposed project. Approximately 0.8% of the MAP contributes to surface water runoff in the A41E catchment (Digby Wells, 2014 and Digby Wells, 2020a).

The Matlabas catchment, located within quaternary catchment A41E, is a largely undeveloped catchment with limited water resources and limited water use. The Limpopo River Basin spans over four countries, namely South Africa, Botswana, Mozambique and Zimbabwe. All four of these countries are members of the Southern Africa Development Community (SADC) and as a result, the basin has considerable importance. The management of shared rivers associated within SADC is guided by the SADC protocol on shared water courses; the management of which is under river basin commissions.

The Limpopo River is the focus of this study. The source of the Limpopo River is at the confluence of the Marico and Crocodile Rivers in South Africa and the system then flows through three distinct river reaches, namely the Upper, Middle and Lower Limpopo River before discharging into the Indian Ocean. The main tributaries which are associated with the upper Limpopo River are the Mahalapswe, Lephale, Lotsane, Mogalakwena, Motloutse and Shashe Rivers, all of which originate in Botswana.

The river-reach relevant for this study is located in the Middle Limpopo River area which comprises all the drainage areas downstream of the Notwane River (tributary of Limpopo River) along the Botswana boundary. Within the South African side, the Limpopo River has a relatively dense network of tributary systems and rivers which are seasonal or have episodic flows.

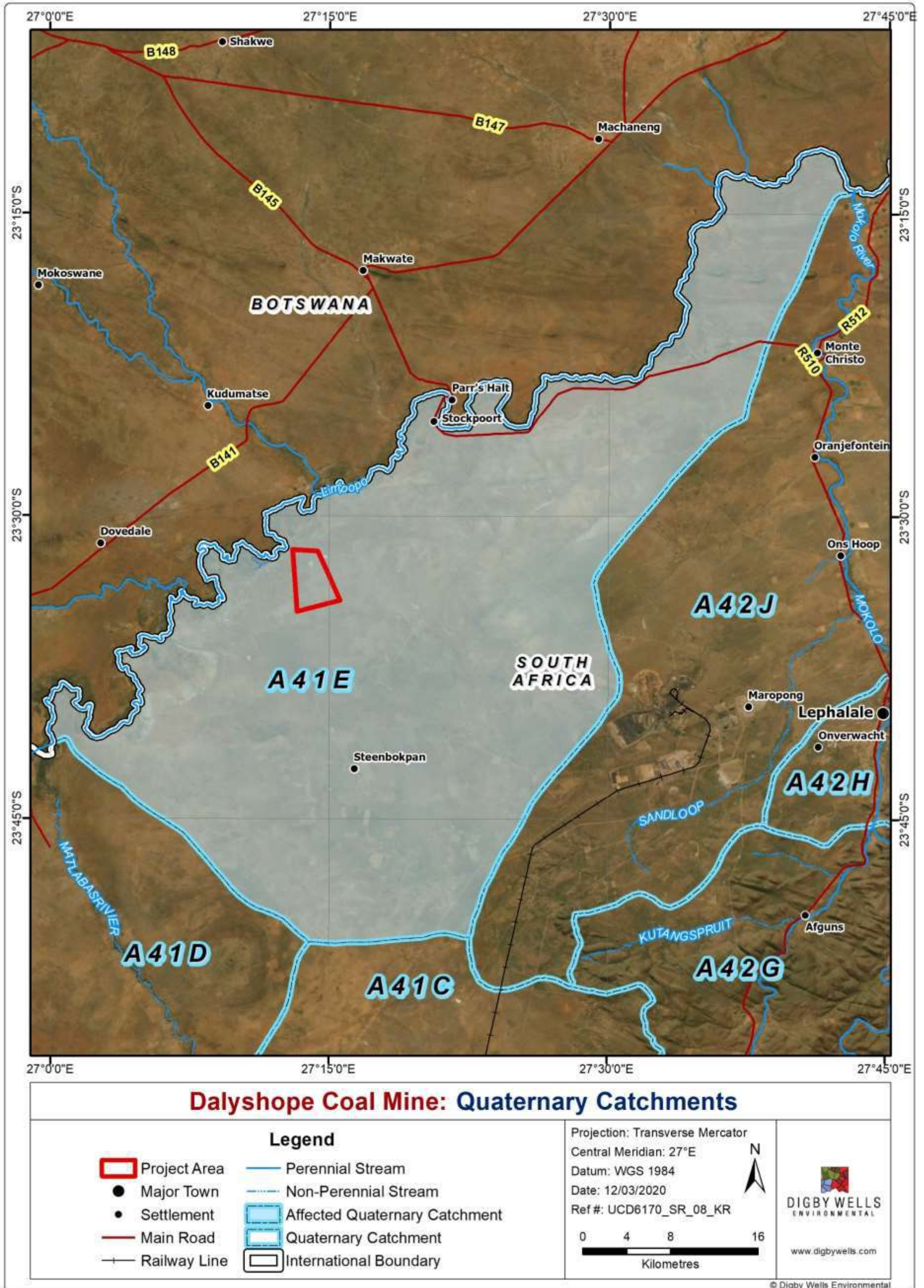


Figure 10-10: Quaternary Catchments

10.6 Soil, Land Use and Land Capability

The baseline Soil, Land Use and Land Capability Assessment focusses on the proposed OC1 Open Cast Pit area as well as on the proposed infrastructure area on the Farm Klaarwater 231 LQ.

10.6.1 Land Use

The current land use of the proposed pit and infrastructure areas was identified by aerial imagery during the desktop assessment and was verified during an on-site inspection. The land uses include open woodland, natural grassland, dry pans, herbaceous wetlands, and scattered villages.

The dominant land use of the Mining Right area can be seen Figure 10-11, indicating open woodland and natural grassland being dominant.

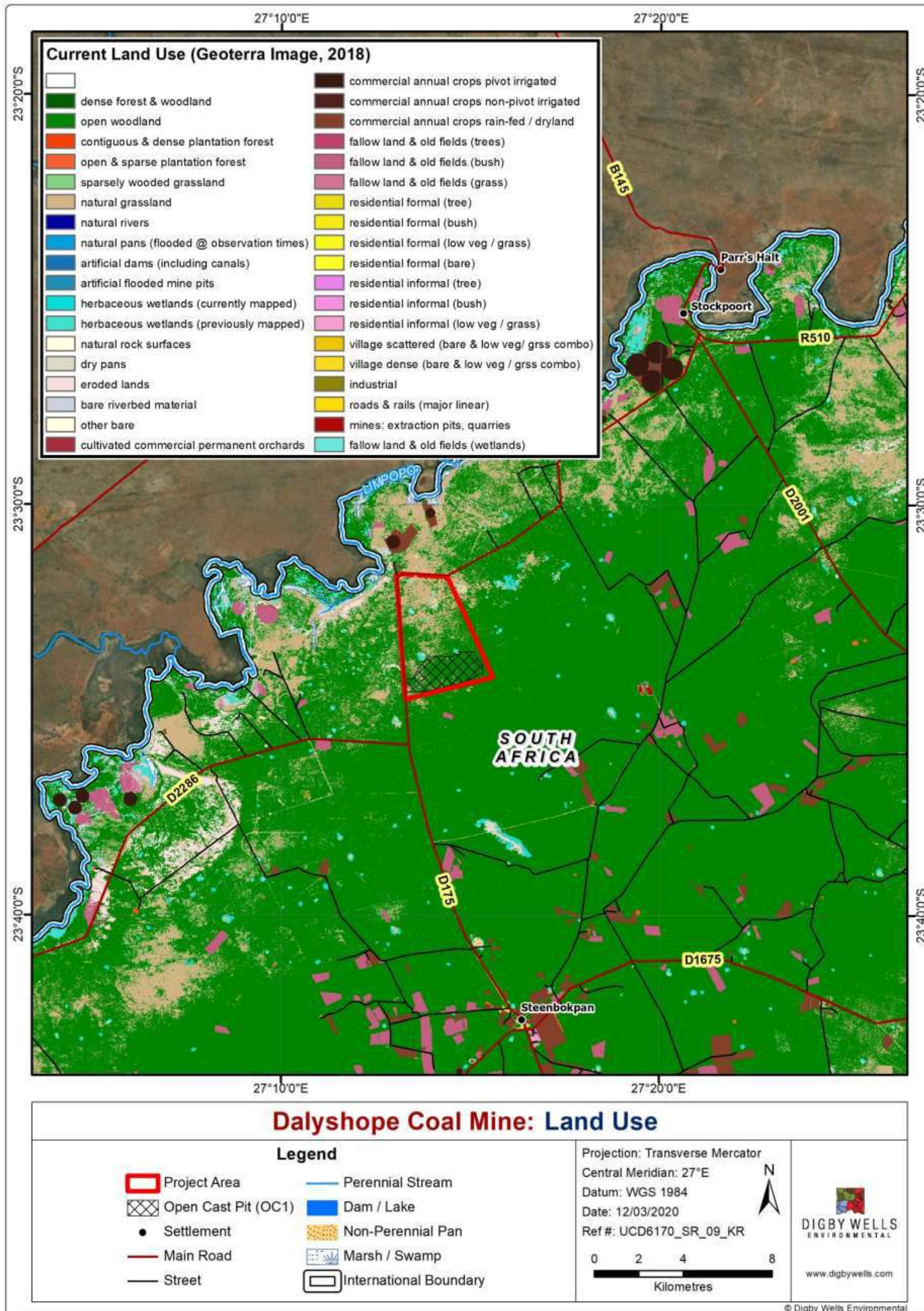


Figure 10-11: Land Use map for Dalyshope Mine (Land Type Survey Staff, 1976-2006)

10.6.2 Land Type and Soil Forms

Existing Land Type and soil data was used to obtain generalised soil patterns and terrain types for the Project area. Land Type data exists in the form of published 1:250 000 maps. These maps indicate delineated areas of similar climate and pedo-systems, which include areas of uniform terrain and soil patterns (Land Type Survey Staff, 1972 – 2006).

The land type data gathered suggested that the land types for the Project area are predominantly of the Ah86 type with a small portion of the Ae257 type. Soils as part of these land types are red to yellow apedal sandy soils, which are generally freely drained and have a high base status. Soils under land type Ah86 have greater than 15% clay content while Ae257 land type indicate deep, sandy soils with depths usually deeper than 300 mm (Figure 10-12).

The red, sandy nature of the soils in the Project area are commonly an indication of moderate potential soils for agriculture. The dominant soils in the Project area are described as low in clay content and thus low water holding capacity and base saturation with only a small portion of high clayey soils within the pan areas. The soils are susceptible to leaching and possible sodification, increasing the pH of the soil. Maintaining the productivity of such soils requires control of the flocculation-dispersion behaviours. Poor land management of these soils can also lead to induced secondary salinity.

The main land types and dominant soil forms as per the Land Type Survey Staff, (1972 – 2006) within the Project area are briefly described in Table 10-1 below.

Table 10-1: Land Type and Dominant Soil Forms

Land Type	Soil Forms	Geology	Characteristics
Ae257	<ul style="list-style-type: none"> • Hutton • Shortlands • Valsrivier • Oakleaf • Clovelly • Arcadia • Mispah • Glenrosa 	Sandstone and siltstone of the Clarens Formation, and undifferentiated shale, sandstone, mudstone, alluvium and coal of the Karoo Sequence.	<ul style="list-style-type: none"> • 500 ha estimated area unavailable for agriculture; • Slopes are between 0% and 4%; • Depths mainly deeper than 1200 mm, with some areas with shallow soils of 50 mm; • 93% of the soils occurring in the foot slope terrain; • Dominant soil types are well drained, sandy, red apedal soils; and • Clay content varying between 8% and 25% in the B-horizon.



Land Type	Soil Forms	Geology	Characteristics
Ah86	<ul style="list-style-type: none"> • Hutton • Clovelly • Fernwood • Longlands • Avalon • Glencoe • Valsrivier • Oakleaf • Katspruit 	<p>Sandstone, alluvium and mudstone of the Waterberg Group (Matlabas subgroup). Undifferentiated shale, sandstone and coal of the Karoo Sequence.</p>	<ul style="list-style-type: none"> • 1000 ha estimated area unavailable for agriculture; • Slopes are between 1% and 3%; • Depths mainly deeper than 1200 mm; • 83% of the Ah86 occurs in the foot slope terrain; and • Dominant soil types are well drained, sandy, red apedal soils.

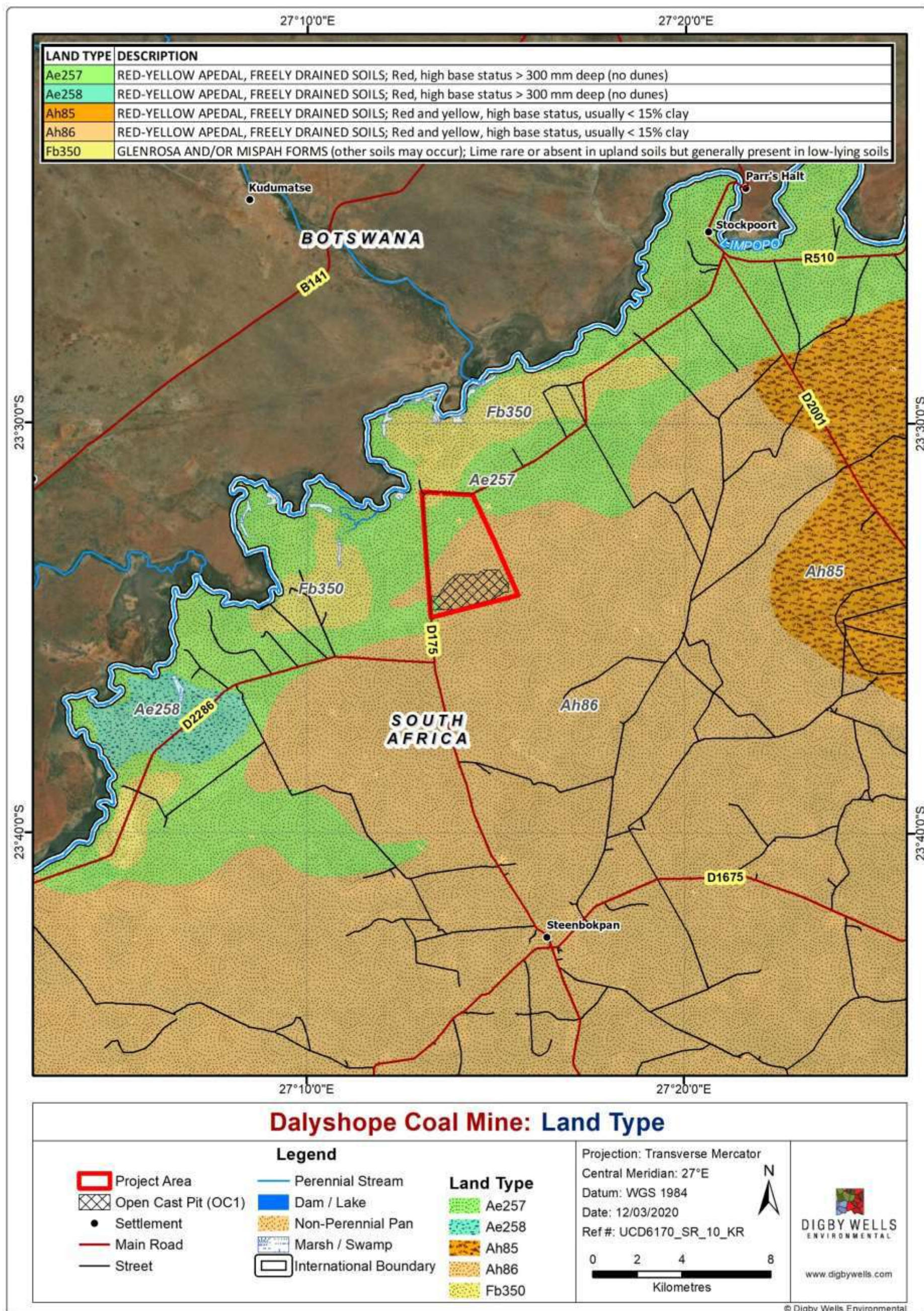


Figure 10-12: Land Type map for Dalyshope Mine (Land Type Survey Staff, 1976-2006)

10.6.3 Soil Profile Characteristics and Dominant Soil Forms

The topography of the Project area is generally flat with small depressions and alluvial deposits in lower lying areas of the landscape. Terrain-morphological units in the landscape are not easy to distinguish, however, two small pans were easily identified within the Project area. Clear signs of water accumulation take place in these depression areas during the rainy season (September to April), but dries up during the rest of the year. As such, these pans can be described as seasonal pans.

The dominant soil types are described in Figure 10-13 to Figure 10-22 below. Existing diggings, holes and excavations were used to assess soil profiles. The typical augured soil profiles were identified as dominantly Orthic A-horizons, overlying Yellow-brown to Red Apedal B-horizons with a Hard-plinthic B2-horizon. The soils in the pan areas as well as the direct areas around the pans were dominated by soils with a high clay content as indicated by the Soft Plinthic, G and Neo-cutanic B-horizons.

The Orthic A-horizons are generally low in organic carbon while the Apedal B-horizons consist of uniform yellow brown to red, iron rich pigmented chroma soils. Apedal soils are deep, sandy, well drained soils which are generally low in organic carbon but are rather easily manageable soils for cultivation.

Some areas within the Project area showed limited soil depths with high volumes of peds (an individual, natural soil aggregate), gravel and stones. This may limit the cultivation potential of the area and can lead to underestimated volumes of calculated soil volumes.

The soil types within the close vicinity of the pans were dominated by soils with a high clay content overlying structured B-horizons. These high clay-containing soils are an indication of alluvial processes. These soils are young soils with clear evidence of emerging soil development in the form of colour variations and clay lamellae. Carbonaceous soils were evident in some parts of the study area, suggesting the presence of high pH soils which may lead to brackish soils, which in turn can lead to vegetation and basal restrictions. This will be confirmed during the soil analysis. Below is a detailed description of soil types found within the Project area.

10.6.3.1 Hutton Soil Form

Orthic A-horizon	Red Apedal B-horizon	Unspecified
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Hutton soil form are usually deep, uniformly red, sandy (apedal) soils, which are well drained and has low organic carbon content and Cation Exchange Capacity (CEC) due to the low clay content. These soils developed from basic parent material (example basalt) and are in an advanced sate of weathering and leaching is indicative.

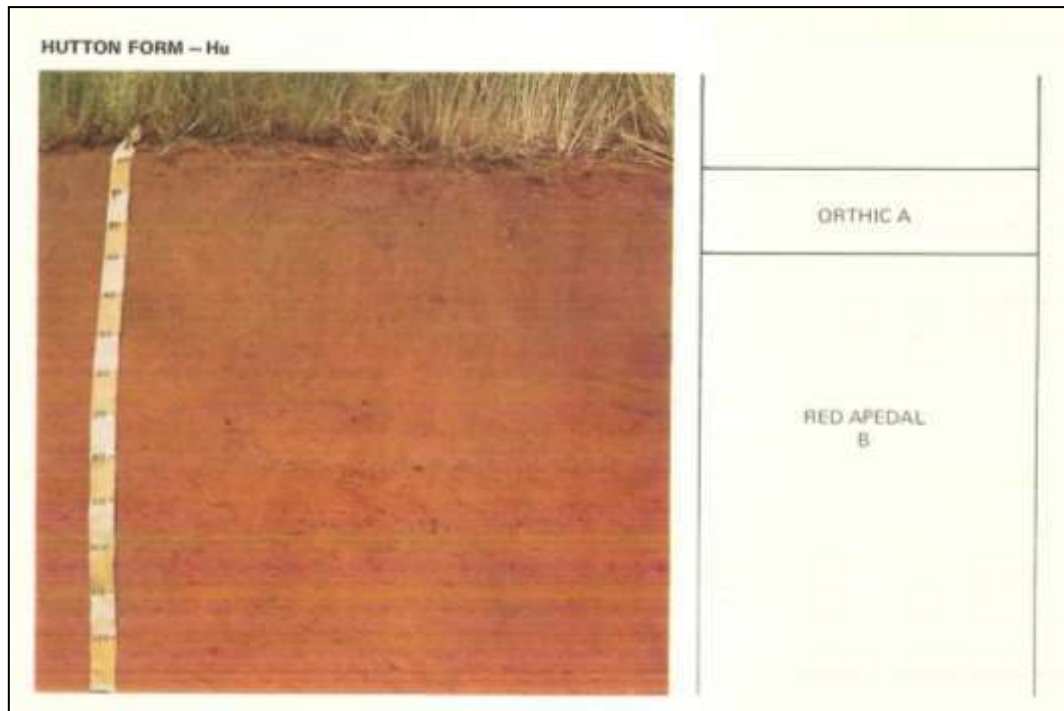


Figure 10-13: A typical cross section for the Hutton soil form (Soil Classification Working Group, 1977)



Figure 10-14: Hutton Soil Profile Description (Taken during the site survey)

10.6.3.2 Clovelly Soil Form

Orthic A-horizon	Yellow brown Apedal B-horizon	Unspecified
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Clovelly soil forms are frequently confused with Hutton soil forms as they share the same characteristics. Clovelly soil forms has a Yellow brown Apedal B-horizon, whereas Hutton soil have a Red-apedal B-horizon. Both these soil forms have deep, sandy, well drained characteristics. Yellow brown Apedal B-horizons are formed from leached Red Apedal B-horizons. Yellow- Brown Apedal B-horizons are thus usually in lower lying areas, more leached and has higher drainage than that of the red soils and are poorer in nutrients.

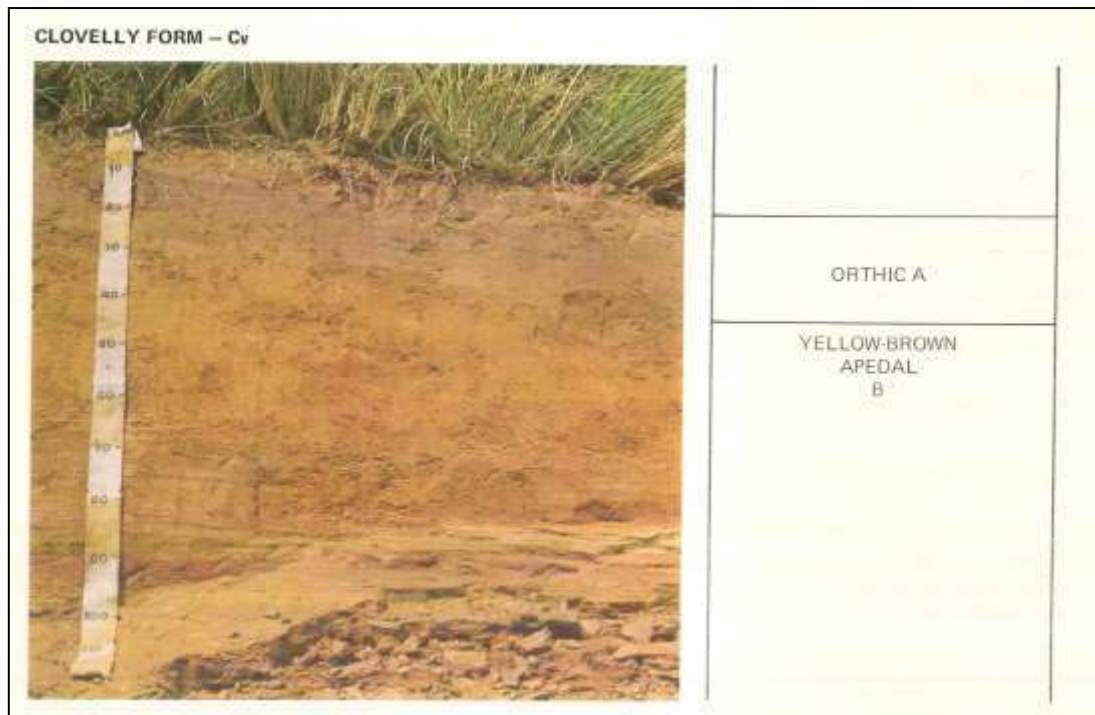


Figure 10-15: A typical cross section for the Clovelly soil form (Soil Classification Working Group, 1977)



Figure 10-16: Clovelly Soil Profile Description (Taken during the site survey)

10.6.3.3 Oakleaf

Oakleaf soil forms consists of a neo-cutanic B-horizon which contains small amounts of calcium and calcium-magnesium but cannot be tested in the field with cold 10% hydrochloric acid. These soils have an unconsolidated material and has an aggregation of soil particles and somewhat structure in the B-horizon. These soils were mainly found in the lower lying areas in the close proximity of the pans. Material of which neo-cutanic horizons form from an area usually from alluvial or colluvial origin.

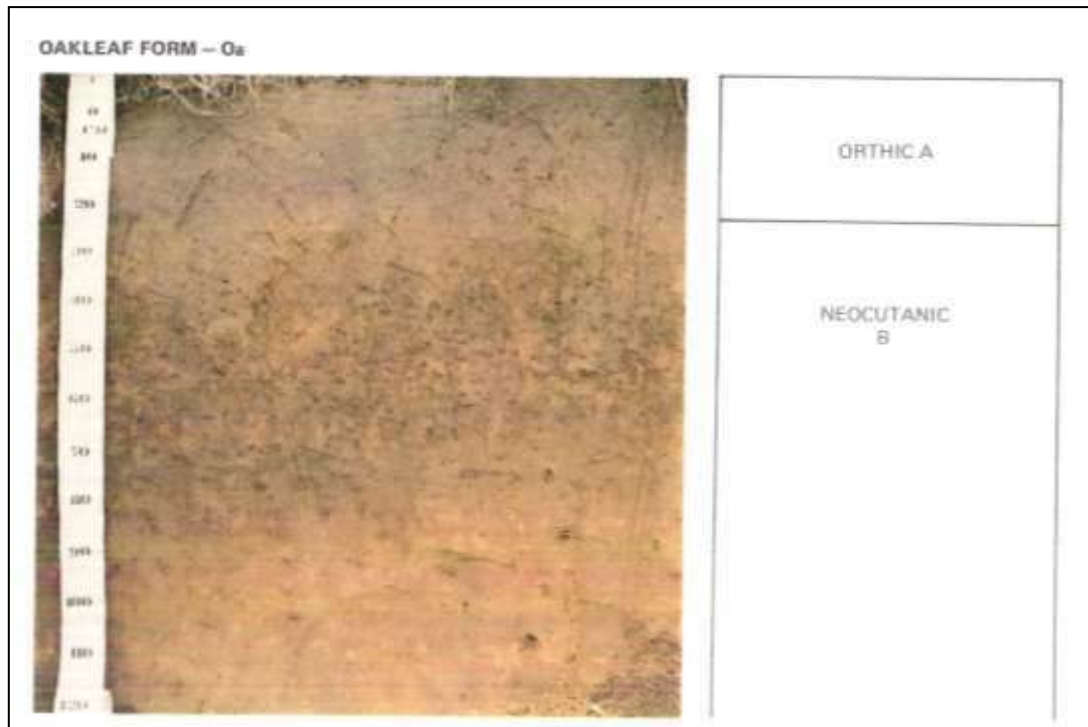


Figure 10-17: A typical cross section for the Oakleaf soil form (Soil Classification Working Group, 1977)



Figure 10-18: Oakleaf Soil Profile Description (Taken during the site survey)

10.6.3.4 Glencoe Soil Form

Orthic A-horizon	Yellow brown Apedal B-horizon	Hard Plinthic B
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Glencoe soil formation present in the study area was shallow soils with a restricting layer at 800 mm. These soils consist of a Yellow-brown Apedal B-horizon overlying a Hard Plinthic layer, which consists of an accumulation of iron- and manganese oxides, restricting drainage and root development.



Figure 10-19: A typical cross section for the Glencoe soil form (Soil Classification Working Group, 1977)



Glencoe soil form. Orthic A-horizon overlying a Yellow-brown Apedal B-horizon overlying a Hard Plinthic B.

Weak structure overlying a low permeable Hard Plinthic layer with Fe-and Mn-oxides.

Figure 10-20: Glencoe Soil Profile Description (Taken during the site survey)

10.6.3.5 Longlands

Orthic A-horizon	E-horizon	Soft Plinthic B
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Longlands soil formations were identified within the pans or in the proximity of the pans. These soils are high in clay content with clear signs of mottles within the first 500 mm of the profile. E-horizons are leached, sandy soils with low structure. They are grey in colour and have a loose consistency. The Soft Plinthic horizon has a high clay content with accumulation of iron and manganese oxides.

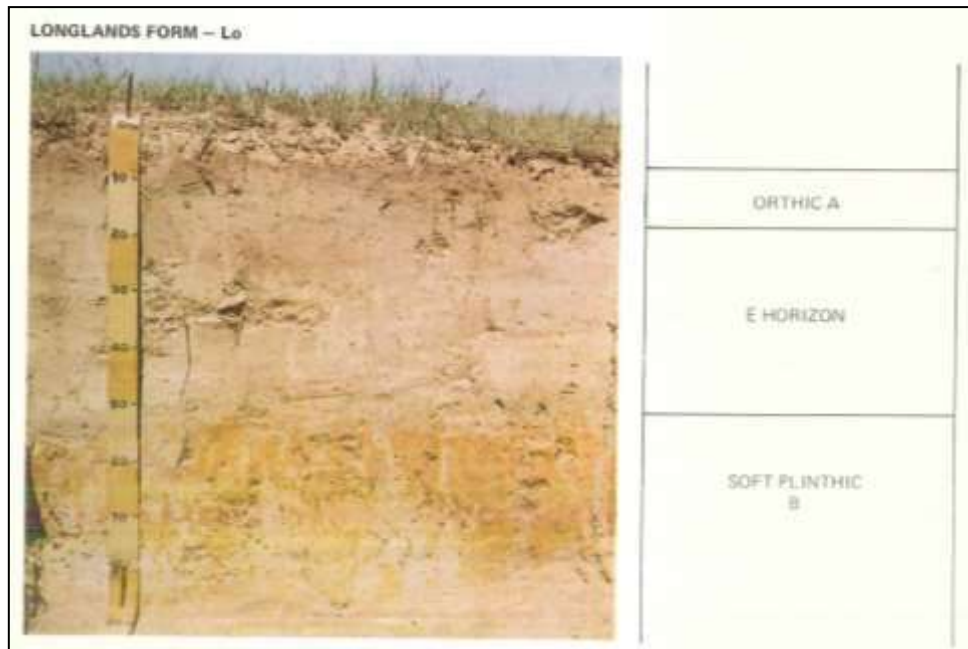


Figure 10-21: A typical cross section for the Longlands soil form (Soil Classification Working Group, 1977)



Longlands soil form. Orthic A-horizon overlying an E-horizon overlying a Soft Plinthic B. Wetland Soil.

E-horizon has a weak structure overlying a low permeable Soft Plinthic layer with Fe-and Mn-oxides and signs of wetness.

Figure 10-22: Longlands Soil Profile Description (Taken during the site survey)

10.6.4 Land Capability

The land capability is determined by assessing the combination of soil, terrain and climate features. The dominant land capability class in the Project area was Class V (Grazing – Moderate Grazing - Figure 10-23). The area is not yet disturbed by mining activities but currently used for wildlife and grazing. A detailed breakdown is given below in Table 10-2.

Table 10-2: Land Capability Classification of Dalyshope Mine Area

Land Capability Class	Description	Dominant Limitation Influencing the Physical Suitability for Agricultural Use
V	Grazing – Moderate Grazing	<p>These lands are generally not suitable for cultivation. The soils have little or no erosion hazard but have other limitations. They are impractical to remove thus limiting their use. These areas are generally used for pasture, range, forestland or wildlife for food and cover.</p> <p>The soils in this class have restrictions regarding cultivations which can limit plant growth and prevent normal tillage of cultivated crops lands. Some limitations include that the soils are frequently wet and overflowed by streams, are stony and have climate limitations. These soils are nearly level and created ponding and prevent drainage of cultivated crops. The soils are not feasible to cultivate and mainly suitable for grasses or trees.</p>

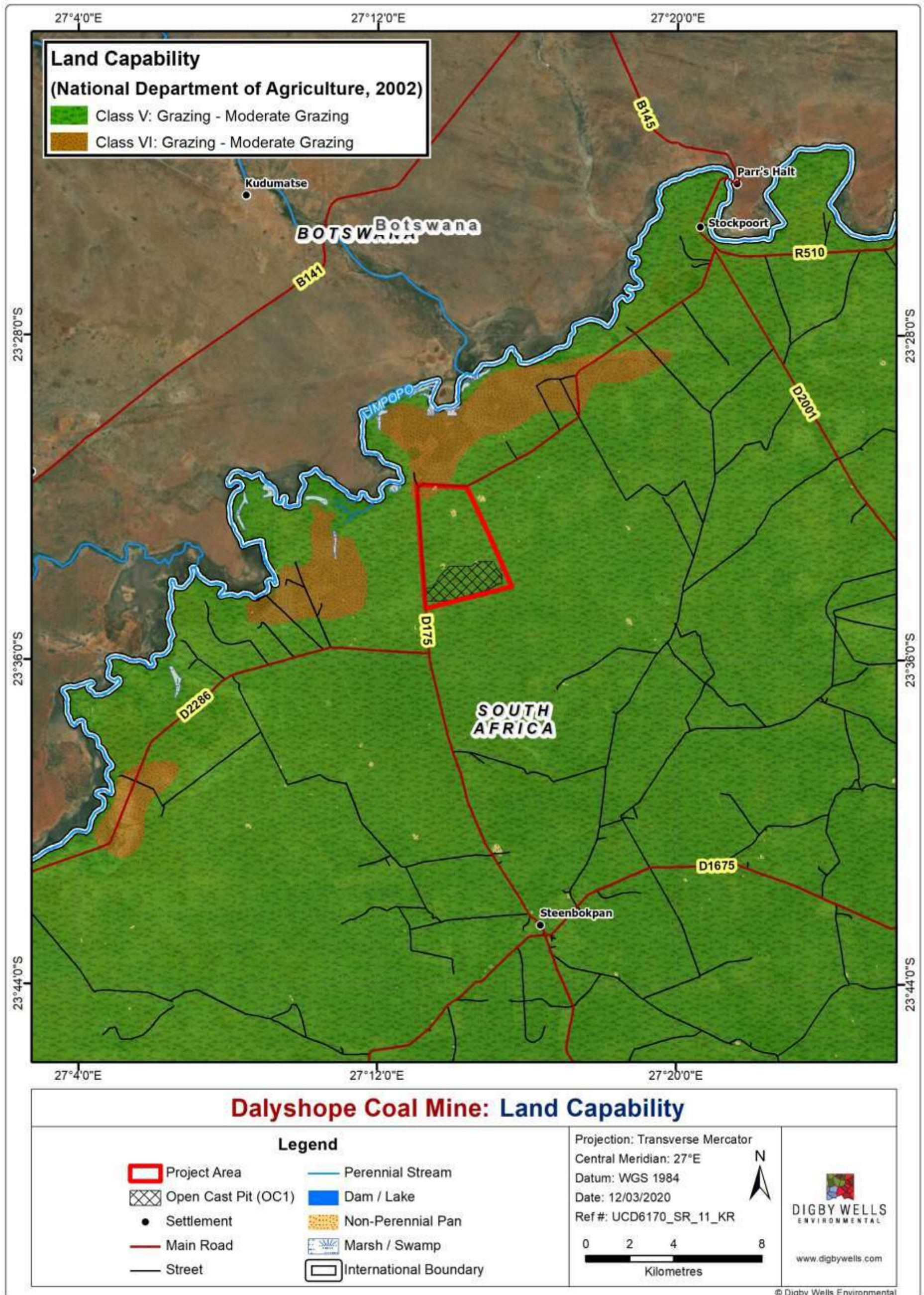


Figure 10-23: Land Capability at Dalyshope Mine

10.7 Flora

The proposed Project area falls within the Least Threatened Limpopo Sweet Bushveld biome (Table 10-3; Figure 10-24) (Mucina & Rutherford, 2006). This vegetation type occurs within the Limpopo Province at an altitude of 700-1000 metres. This vegetation type extends across the border, into Botswana and consists of plains, which are traversed by several tributaries of the Limpopo River. A Critical Biodiversity Area and Protected Area are located within a close proximity to the study area (see Figure 10-25 and Figure 10-26).

Vegetation consists of short, open woodland. Areas which have been disturbed are dominated by thickets of Blue Thorn (*Senegalia erubescens*), Black Thorn (*Senegalia mellifera*) and Sickle Bush (*Dichrostachys cinerea*) (Mucina and Rutherford, 2006).

Tall trees include Ankle thorn (*Vachellia robusta*) and Black Monkey Thorn (*Senegalia burkei*). Smaller trees include Blue Thorn (*Senegalia erubescens*), *Acacia fleckii* (*Senegalia cinerea*), *Vachellia nilotica*, *Senegalia senegal*, *Albizia anthelminitica*, *Boscia albitrunca*, *Combretum apiculatum*, and *Terminalia sericea*.

A site visit during the wet season was conducted in February 2020 for the Project area and determined that the vegetation was similar to the description provided by Mucina and Rutherford (2006). Sandy soils, high levels of termitaria (termite) activity and evident signs of moderate grazing resulted in the Project area in a relatively good condition.

Dominance of species varied marginally throughout the Project area with an abundance of cosmopolitan species such as *Boscia* spp. and *Grewia* spp. Various portions of the Project area were dominated by smaller trees of *S. erubescens*, *Terminalia cinerea*, *Dichrostachys cinerea*, *Combretum apiculatum* and interspersed with *Commiphora pyracanthoides* and numerous forbs such as *Crotalaria* sp., *Tephrosia multijuga* and *Tribulus terrestris*.

Five major vegetation types were noted within and adjacent to the Project area. Three of these are types of bushveld with different dominant species, and the fourth a very distinctive watercourse (pan vegetation). The five identified vegetation communities are:

- Acacia (*Senegalia* and *Vachellia*) woodland;
- Combretum woodland;
- Terminalia woodland;
- Pan vegetation; and
- Riparian vegetation (adjacent to Project area).

Most of the Project area is comprised of bushveld vegetation with a small tree and herbaceous layer indicating a Savanna Woodland.

Table 10-3: Conservation status of the Limpopo Sweet Bushveld (Mucina & Rutherford, 2006)

Name of Vegetation type	Limpopo sweet bushveld
Code as used in the Book - contains space	SVcb 19
Conservation Target (percent of area)	19%
Description of conservation status	Least threatened
Name of the biome	Central Bushveld
Threats and uses	About 5% transformed, mainly by cultivation.

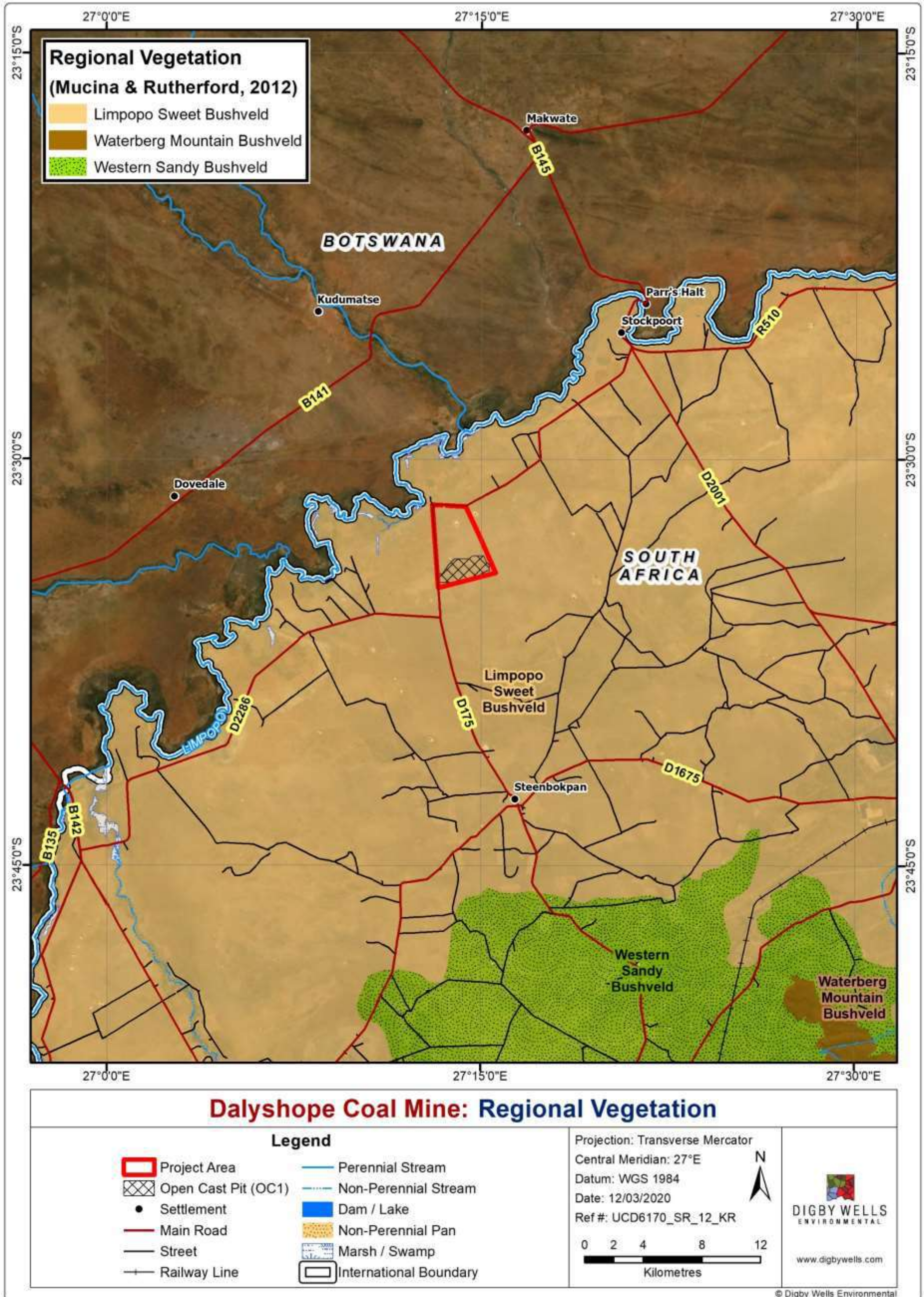


Figure 10-24: Regional Vegetation

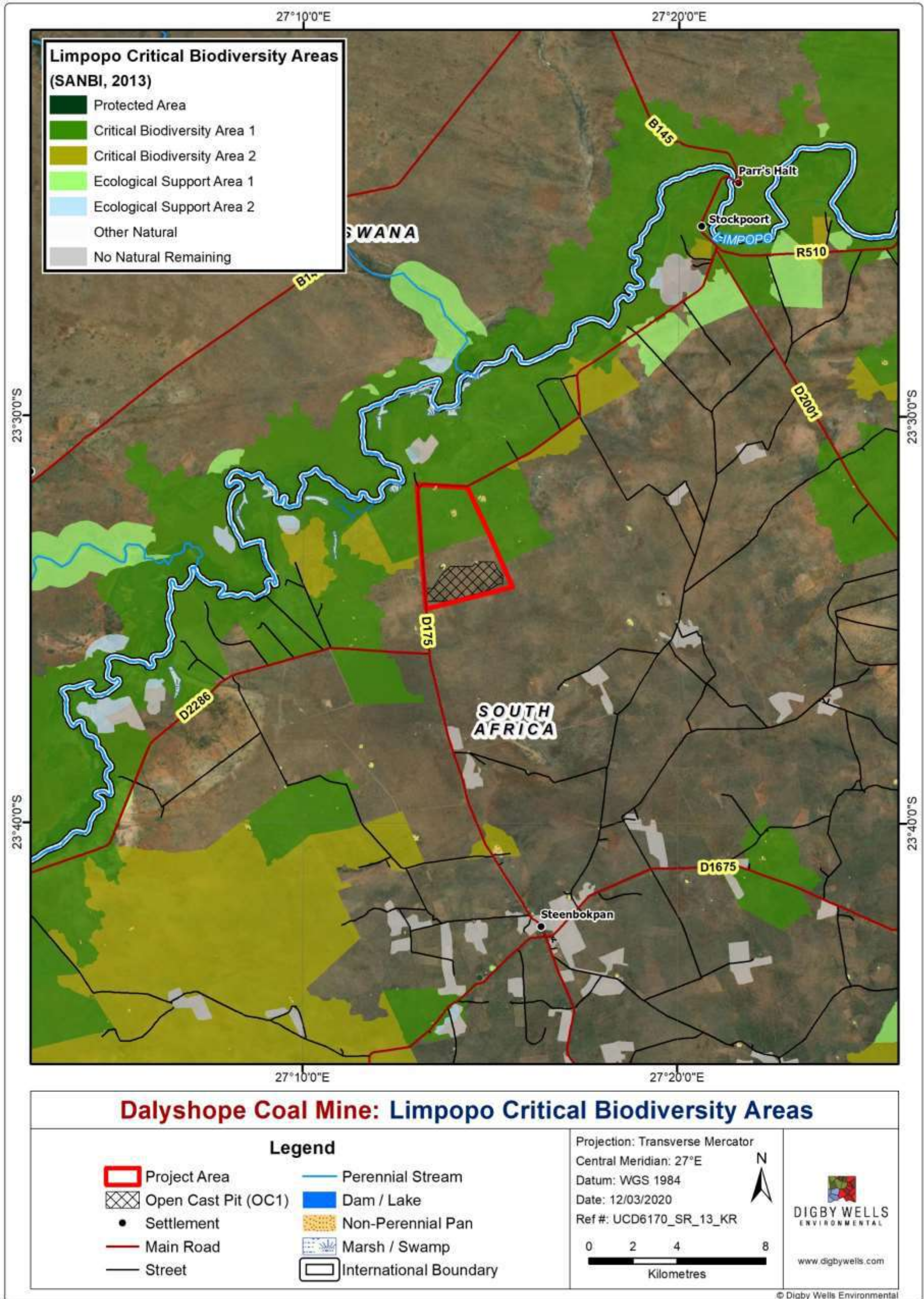


Figure 10-25: Limpopo Critical Biodiversity Areas within Project Area

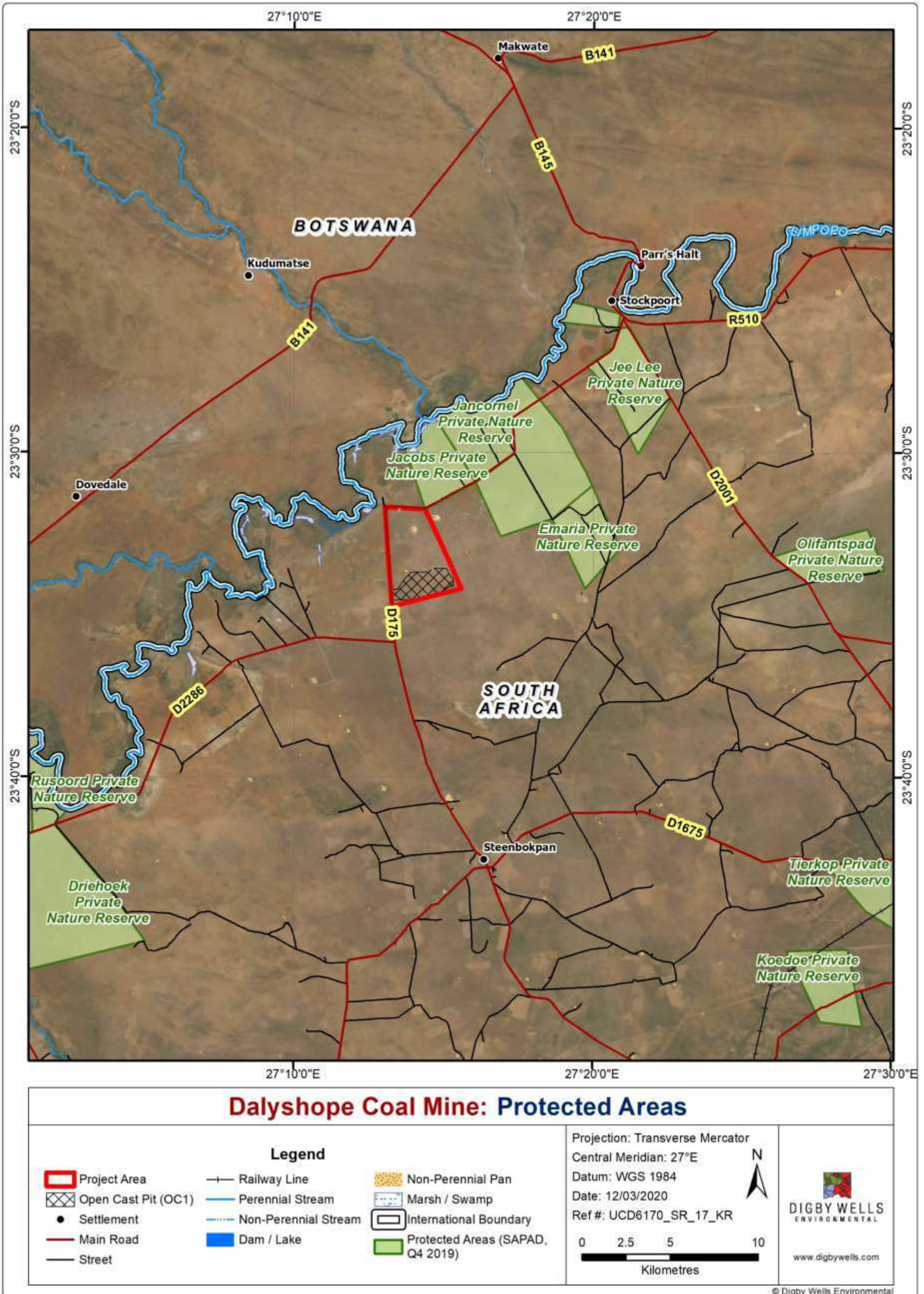


Figure 10-26: Protected Areas in proximity to the Dalyshope Site

10.7.1 International Union for the Conservation of Nature (IUCN) Red Data Species

The proposed Project area lies within two Quarter Degree Squares (QDSs) namely 2327CA and 2327CB. The Pretoria Computerised Information System (PRECIS) (BODATSA-POSA, 2016) database was consulted to establish previously recorded plant species in the locality of the Project area by retrieving data for the relevant QDSs. According to the PRECIS, no Red Data species are expected to be present for the 2327CA and 2327CB QDSs.

10.7.2 Protected Trees

Three Nationally Protected Tree species (according to Schedule A the National Forests Act (NFA) (Act. 89 of 1998) and one Declining yet Least Concern (IUCN status) species (according to the South African Red Data list) were identified during the field investigations (Table 10-4). In addition, one provincially protected plant species, *Grewia rogersii* (according to Schedule 12 of the Limpopo Environmental Management Act, 2003 (Act No. 7 of 2003) (LEMA)) was also recorded. It is important to note that this does not necessarily imply that additional Species of Special Concern (SSC) do not occur on site.

Table 10-4: Floral Species of Special Concern

Family	Scientific Name	Common Name	Protected Status
Capparaceae	<i>Boscia albitrunca</i>	Shepherds Bush Tree	Schedule A of NFA
Combretaceae	<i>Combretum imberbe</i>	Leadwood	Schedule A of NFA
Fabaceae	<i>Vachellia erioloba</i>	Camel Thorn	Schedule A of NFA
Malvaceae	<i>Grewia rogersii</i>	Waterberg Raisin	Schedule 12 of LEMA

10.8 Fauna

10.8.1 Mammals

The diversity of vegetation types present ensures an ecologically diverse assemblage of plant species, which in turn supports a variety of mammal species. Some of the farms surrounding Project area are involved in the wildlife industry (mostly hunting) and access to some of these farms was restricted. Accordingly, species lists could not be compiled. As a result, the list provided below is restricted to species naturally occurring in the area and does not include introduced or re-introduced species.

Small mammals were sampled through opportunistic sightings, as well as the use of Sherman traps. Large mammals were recorded using tracks and sign, as well as opportunistic sightings and camera traps (trail cameras) placed throughout the site, mainly at water points. Opportunistic sightings during site survey in February 2020 of mammals included Gemsbok (*Oryx gazella*), Warthog (*Phacochoerus africanus*), and a Vlei Rat (*Otomys irroratus*).

Of the mammals potentially occurring on site, 12 have been assigned a Red Data status. These species are listed in Table 10-5 below.

Table 10-5: Red Data mammal species

Common Name	Status	IUCN Status
African Elephant	Vulnerable	Least Concern
African Weasel	N/A	Lower Risk - least concern
Brown Hyaena	Near Threatened	Lower Risk - near threatened
Bushveld Gerbil	N/A	Least Concern
Darling's Horseshoe Bat	Near Threatened	Least Concern
Cheetah	Vulnerable	Vulnerable - Decreasing
Forest Shrew	N/A	Least Concern
Leopard	Vulnerable	Vulnerable – Decreasing
Geoffroy's Horseshoe Bat	Near Threatened	Least Concern
Greater Dwarf Shrew	N/A	
Hippo	Vulnerable	Least Concern
Honey Badger	Near Threatened	Lower Risk - least concern
Least Dwarf Shrew	N/A	Least Concern
Lesser Dwarf Shrew	N/A	Least Concern
Lesser Grey-browed Musk Shrew	N/A	Least Concern
Lesser Red Musk Shrew	N/A	Least Concern
Reddish-grey Musk Shrew	N/A	Least Concern
Rock Dormouse	N/A	Least Concern
Rusty Bat	Near Threatened	Least Concern
Sable Antelope	Vulnerable	Lower Risk - conservation dependent
Schreiber's Long-fingered Bat	Near Threatened	Near Threatened
Serval	Near Threatened	Least Concern
Short-eared Trident Bat	Critically endangered	Vulnerable
Short-snouted Elephant-shrew	N/A	Least concern
Single-striped Mouse	N/A	Least Concern
South African Hedgehog	Near Threatened	Lower Risk - least concern
Spotted-necked Otter	Near Threatened	Least Concern
Sundevall's Leaf-nosed Bat	N/A	Least concern

Common Name	Status	IUCN Status
Swamp Musk Shrew	N/A	Least Concern
Temminck's Hairy Bat	Near Threatened	Least Concern
Tiny Musk Shrew	N/A	Least Concern
Water Rat	Near Threatened	Least Concern
Welwitsch's Hairy Bat	Near Threatened	Least Concern

10.8.2 Avifauna

Birds were surveyed throughout the site visit and any opportunistic sightings were also recorded. Birds have been viewed as good ecological indicators, since their presence or absence tends to represent conditions pertaining to the proper functioning of an ecosystem. According to the South African Bird Atlas Project (SABAP2), almost 300 species of birds have been identified in the area; the majority of these birds are comprised of bushveld species.

Of all birds that could potentially occur within QDS 2327 CA and CB, 14 have been assigned a Red Data status, 25 are either endemic or near endemic to South Africa. These species are listed in Table 10-6 below.

During the site survey in February 2020, a Marabou (*Leptoptilos crumenifer*) (Near-Threatened) and Saddle-billed (*Ephippiorhynchus senegalensis*) (Endangered) Stork were observed in the pan vegetation type.

Table 10-6: Red Data avifauna species

Common Name	Scientific Name	Status	Endemicity
Babbler, Southern Pied	<i>Turdoides bicolor</i>	-	Endemic
Barbet, Acacia Pied	<i>Tricholaema leucomelas</i>	-	Near-endemic
Bateleur, Bateleur	<i>Terathopius ecaudatus</i>	VU	
Bulbul, African Red-eyed	<i>Pycnonotus nigricans</i>	-	Near-endemic
Bustard, Kori	<i>Ardeotis kori</i>	VU	
Canary, Yellow	<i>Crithagra flaviventris</i>	-	Near-endemic
Eagle, Martial	<i>Polemaetus bellicosus</i>	VU	
Eagle, Tawny	<i>Aquila rapax</i>	VU	
Falcon, Lanner	<i>Falco biarmicus</i>	NT	
Finch, Scaly feathered	<i>Sporopipes squamifrons</i>	-	Near-endemic
Flamingo, Greater	<i>Phoenicopterus ruber</i>	NT	
Flycatcher, Marico	<i>Bradornis mariquensis</i>	-	Near-endemic

Common Name	Scientific Name	Status	Endemicity
Goshawk, Southern Pale Chanting	<i>Melierax canorus</i>	-	Near-endemic
Hornbill, Southern Yellow-billed	<i>Tockus leucomelas</i>	-	Near-endemic
Korhaan, Red-crested	<i>Lophotis ruficrista</i>	-	Near-endemic
Lark, Sabota	<i>Calendulauda sabota</i>	-	Near-endemic
Oxpecker, Red-billed	<i>Buphagus erythrorhynchus</i>	NT	
Painted-snipe, Greater	<i>Rostratula benghalensis</i>	NT	
Pratincole, Black-winged	<i>Glareola nordmanni</i>	NT	
Prinia, Black-chested	<i>Prinia flavicans</i>	-	Near-endemic
Sandgrouse, Burchell's	<i>Pterocles burchelli</i>	-	Near-endemic
Sandgrouse, Double-banded	<i>Pterocles bicinctus</i>	-	Near-endemic
Scrub-Robin, Kalahari	<i>Cercotrichas paena</i>	-	Near-endemic
Shrike, Crimson-breasted	<i>Laniarius atrococcineus</i>	-	Near-endemic
Shrike, Southern White-crowned	<i>Eurocephalus anguimans</i>	-	Near-endemic
Sparrow, Cape	<i>Passer melanurus</i>	-	Near-endemic
Sparrow, Great	<i>Passer motitensis</i>	-	Near-endemic
Spurfowl, Natal	<i>Pternistis natalensis</i>	-	Near-endemic
Starling, Burchell's	<i>Lamprotornis australis</i>	-	Near-endemic
Stork, Marabou	<i>Leptoptilos crumeniferus</i>	NT	
Stork, Saddle-billed	<i>Ephippiorhynchus senegalensis</i>	EN	
Stork, Yellow-billed	<i>Mycteria ibis</i>	NT	
Tit, Ashy	<i>Parus cinerascens</i>	-	Near-endemic
Tit-Babbler, Chestnut-vented	<i>Parisoma subcaeruleum</i>	-	Near-endemic
Vulture, Lappet-faced	<i>Torgos tracheliotus</i>	VU	
Vulture, White-backed	<i>Gyps africanus</i>	VU	
White-eye, Cape	<i>Zosterops virens</i>	-	Endemic
Whydah, Shaft-tailed	<i>Vidua regia</i>	-	Near-endemic
Wren-Warbler, Barred	<i>Calamonastes fasciolatus</i>	-	Near-endemic

10.8.3 Reptiles

Pitfall traps were placed around the site during the site visit. Opportunistic sightings were also recorded. Active herpetofaunal surveys were undertaken where trees, logs and rocks were searched and overturned. During the recent wet season survey of February 2020, a number of reptile sightings were recorded and species such as Black Mamba (*Dendroaspis*

polylepis), Snouted Cobra (*Naja annulifera*), Puff Adder (*Bitis arietans*) and Flap-neck Chameleon (*Chamaeleo* sp.) were encountered during the site survey.

Of the reptile species that could potentially occur within the Project area, two have been assigned a Red Data status; and these species are listed in Table 10-7.

Table 10-7: Red Data reptile species

Common Name	Scientific Name	Status
Aurora House Snake	<i>Lamprophis aurora</i>	Rare
Southern African Python	<i>Python natalensis</i>	Vulnerable

10.8.4 Amphibians

Amphibians are viewed to be good indicators of change to the whole ecosystem as they are sensitive to changes in the aquatic and terrestrial environments (Waddle, 2006). Most species of amphibians are dependent on the aquatic environment for reproduction. Additionally, amphibians are sensitive to water quality and ultraviolet radiation because of their permeable skin (Gerlanc and Kaufman, 2005).

Within the large grass pan adjacent to the Project area, Bubbling Kassina (*Kassina senegalensis*), the Giant African Bullfrog (*Pyxicephalus adspersus*) and the Lesser Bullfrog (*Pyxicephalus edulis*) were identified. Due to loss of habitat and negatively impacting anthropogenic activities, the Giant African Bullfrog is listed as Near Threatened in South Africa according to the IUCN.

Red Data amphibians expected to be present within the proposed Project area are listed in Table 10-8 below.

Table 10-8: Red Data amphibian species

Common Name	Scientific Name	Status
Giant African Bullfrog	<i>Pyxicephalus adspersus</i>	Near Threatened
Golden Leaf-Folding Frog	<i>Africalus aureus</i>	Rare
Pickersgill's Reed Frog	<i>Hyperolius pickersgilli</i>	Rare

10.8.5 Invertebrates

Butterflies are a good indication of the various habitats available in a specific area (Woodhall 2005). Although many species are eurytopes (able to use a wide range of habitats) and are widespread and common, South Africa has many stenotrope (specific habitat requirements with populations concentrated in a small area) species, which may be very specialised (Woodhall 2005). Butterflies are useful indicators as they are relatively easy to locate and catch, and to identify. It is for this reason that Lepidoptera will be used as the primary focus for the invertebrate survey. During the wet season survey in February 2020, a variety of butterflies were observed indicating a good diversity. Species included the Zebra White

(*Pinacopteryx eriphia*), Common Joker (*Byblia* sp.), Red, Orange and Purple Tip (*Colotis* sp.), Common Grass Yellow (*Eurema hecabe*), African Monarch (*Danaus chrysippus*), Brown-veined White (*Belenois aurota*), Blue and Yellow Pansy (*Junonia* sp.).

Red Data species likely to be found on the Dalyshope Coal Mining Project site are listed in Table 10-9. The specific Red Data conservation status was not always known.

Table 10-9: Red Data Lepidoptera (moths and butterflies) species

Scientific Name	Habitat	Status
<i>Acraea (Acraea) machequena</i>	Bushveld	Red Data
<i>Aloeides dentatis maseruna</i>	Grassland	Vulnerable
<i>Andronymus neander neander</i>	Bushveld	Red Data
<i>Gegenes hottentota</i>	Riparian	Vulnerable
<i>Lepidochrysops hypopodia</i>	Grassland	Red Data
<i>Lepidochrysops praeterita</i>	Grassland	Red Data
<i>Metisella meninx</i>	Riparian	Red Data
<i>Neita neita</i>	Bushveld	Red Data
<i>Platylesches dolomitica</i>	Grassland	Vulnerable
<i>Spialia paula</i>	Bushveld	Red Data
<i>Tuxentius melaena griqua</i>	Riparian	Red Data

10.9 Wetlands

Studies conducted for the proposed Project identified wetlands on site. The baseline has been conducted at a desktop level and a site visit to delineate wetlands will be conducted during the EIA investigation.

10.9.1 Limpopo Critical Biodiversity areas and Biodiversity Sector Plan

Critical Biodiversity Areas (CBA's) are terrestrial and aquatic features in the landscape that are critical for retaining biodiversity and supporting continued ecosystem functioning and services (SANBI, 2007). CBA's are therefore areas of the landscape that need to be maintained in a natural or near-natural state to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. In other words, if these areas are not maintained in a natural or near-natural state then biodiversity conservation targets cannot be met. Maintaining an area in a natural state can include a variety of biodiversity-compatible land uses and resource uses (Desmet *et al.*, 2009).

CBA's are Terrestrial (T) and Aquatic (A) features in the landscape that are critical for retaining biodiversity and supporting continued ecosystem functioning and services (SANBI, 2007). The CBA's are ranked as follows:

- CBA 1 (including PA's, T1 and A1), which are natural landscapes with no disturbances, and which are irreplaceable in terms of reaching conservation targets within the district;
- CBA 2 (including T2 and A2), which are near natural landscapes with limited disturbances, which has intermediate irreplaceability with regards to reaching conservation targets; and
- In addition, Ecological Support Areas (ESA's) that support key biodiversity resources (e.g. water) or ecological processes (e.g. movement corridors) in the landscape are also mapped. ESA's are functional landscapes that are moderately disturbed but maintain basic functionality and connect CBA's.

The proposed Project area falls largely within the 'CBA Irreplaceable' (CBA 1) as shown in Figure 10-25 above. The area under which OC1 falls under is currently undefined.

10.9.2 Wetland Delineation and Classification

The total Project area comprises approximately 4970 ha, with OC1 only occupying 542 ha. Only small sections of OC1 are occupied by depression pans, which account to 35.41 ha including the calculated buffer zone. Three wetlands were recorded on or directly adjacent to OC1. Some non-perennial pans have been identified within the Farm Nazarov 685 LQ. All three of these wetlands are classified as Non-Perennial Episodic Endorheic Depression Pans (Figure 10-27). This indicates that the depression wetlands only naturally fill with water during high rainfall events where it then remains saturated for only small periods during the year, remaining dry the rest of the year. Pans are generally formed by aeolian deflation on susceptible surfaces (Goudie & Wells, 1995). No other wetlands are located within 500 m of the three depression pan wetlands recorded on the OC1 area.

A buffer zone is defined as a strip of land surrounding a wetland or riparian area in which activities are controlled or restricted (DWAF, 2005). Buffer zones have been shown to perform a wide range of functions and have therefore been widely proposed as a standard measure to protect water resources and their associated biodiversity. The recommended calculated buffer zones applicable to the proposed Project (Based on the activity class 'Mining - Worst Case Scenario) are as follows:

- Construction Phase: 50 m; and
- Operational Phase: 81 m.

Being inward draining systems, pans are vulnerable to pollution in their catchment. Pollutants draining into these pans become concentrated and significantly affect water quality. Thus, the calculated buffer zones may not be suitably large enough for pans unless the direct catchment of the pans are also excluded from any harmful activities.



It should be noted that the buffer calculation tool does not take into account the effects of climate change or cumulative impacts to flood flows resulting from transformed catchments. Therefore, a conservative approach to the application of buffer zones is encouraged. Furthermore, the buffer recommended in this report will be reviewed during the EIA phase to include possible sensitive fauna species.

Figure 10-27 depicts the current layout of OC1 and infrastructure, which shows that the infrastructure placement encroaches within 500m of DP2, and mining of OC1 will occur within 500m of all three pans, and DP3 will be mined through. The impacts thereof will be assessed in the Impact Assessment Phase of the Project.

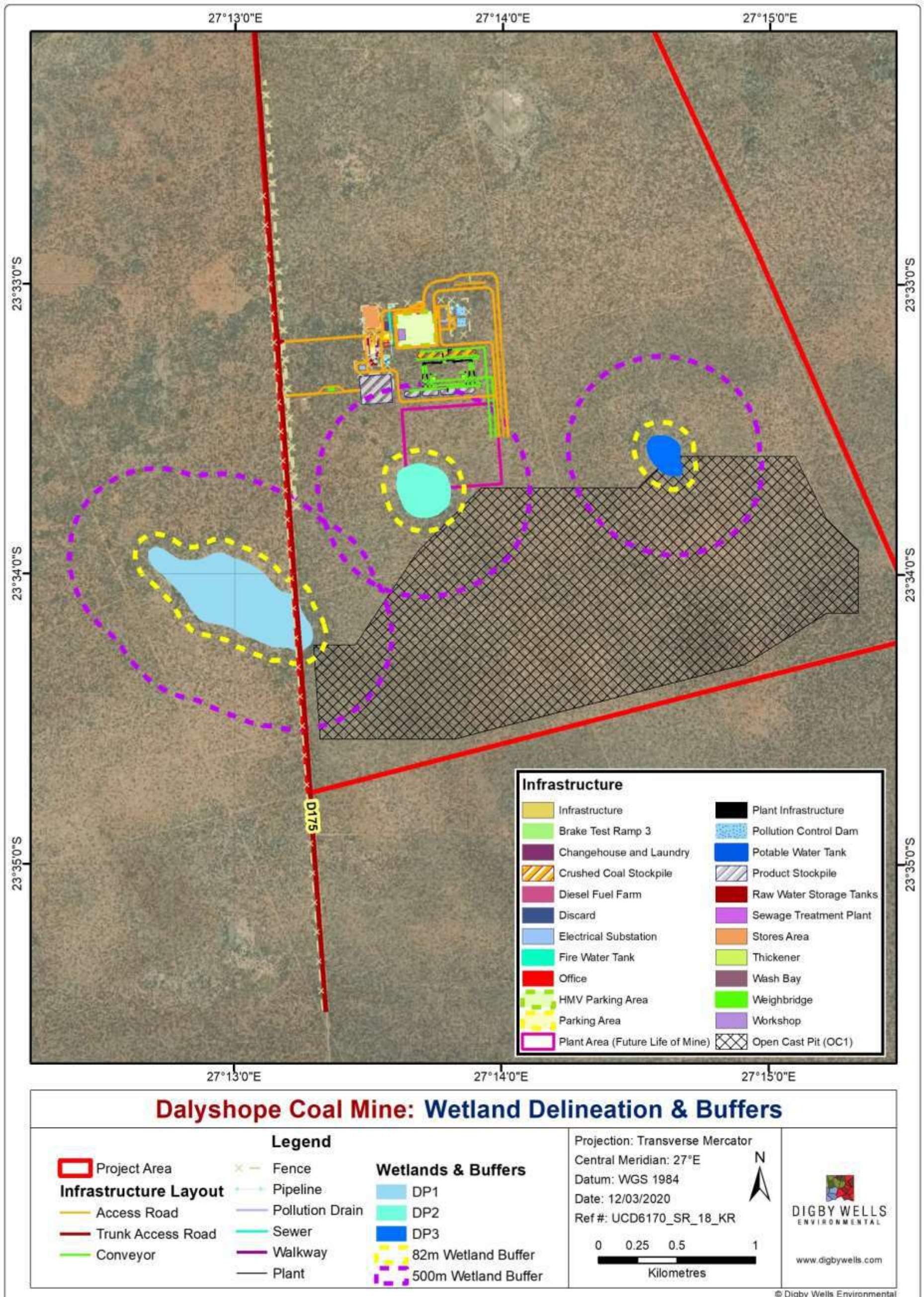


Figure 10-27: Wetland Delineation and Buffers

10.10 Aquatic Ecology

The Project area occurs within the Southern Temperate Highveld freshwater ecoregion, which combines headwaters of coastal basins that drain to the Indian Ocean with those of the Atlantic-draining Orange basin (Abell *et al.*, 2008; Darwall *et al.*, 2009). Table 10-10 provides a summary of the main attributes of the Limpopo Plain ecoregion (Kleynhans *et al.*, 2005).

Table 10-10: Main attributes of the Limpopo Plain Ecoregion

Main Attributes	Highveld Ecoregion
Terrain Morphology: Broad division (dominant types in bold) (Primary)	Plains; Low Relief; Plains; moderate relief; Lowlands; Hills and Mountains; moderate and high relief; Closed hills; Mountains; moderate and high relief (limited)
Vegetation types (dominant types in bold) (Primary)	Mopane Bushveld; Sweet Bushveld; Mixed Bushveld; Waterberg Moist Mountain Bushveld; Clay Thorn Bushveld; Kalahari Plains Thorn Bushveld
Altitude (m a.m.s.l) (modifying)	300-1100 (1100-1300 limited)
MAP (mm) (Secondary)	200 to 600
Coefficient of Variation (% of annual precipitation)	25 to 40
Rainfall concentration index	60 to >65
Rainfall seasonality	Early to mid-summer
Mean annual temp. (°C)	18 to >22
Mean daily max. temp. (°C): February	26 to 32
Mean daily max. temp. (°C): July	20 to >24
Mean daily min. temp. (°C): February	16 to >20
Mean daily min temp. (°C): July	2 to >10
Median annual simulated runoff (mm) for quaternary catchment	<5 to 60 (60-100 limited)

10.10.1 Regional Biodiversity Importance

The NFEPA project represents a multi-partner project between the Council for Scientific and Industrial Research (CSIR), SANBI, Water Research Commission (WRC), Department of Water Affairs (DWA; now Department of Water and Sanitation, or DWS), Department of Environmental Affairs (DEA), Worldwide Fund for Nature (WWF), South African Institute of Aquatic Biodiversity (SAIAB) and South African National Parks (SANParks). More specifically, the NFEPA project aims to:

- Identify Freshwater Ecosystem Priority Areas (hereafter referred to as 'FEPAs') to meet national biodiversity goals for freshwater ecosystems;
- Develop a basis for effective implementation of measures to protect FEPAs, including free-flowing rivers; and
- Maximize synergies and alignment with other national level initiatives, including the National Biodiversity Assessment (NBA) and the Cross-Sector Policy Objectives for Inland Water Conservation (Driver *et al.*, 2011).

The project further aimed to maximize synergies and alignment with other national level initiatives, including the National Biodiversity Assessment (NBA) and the Cross-Sector Policy Objectives for Inland Water Conservation (Driver *et al.*, 2011).

Based on the current outputs of the NFEPA project (Nel *et al.*, 2011), there are no areas of potential concern within the sub-quaternary catchment associated with the proposed Project. River FEPA and Phase 2 River FEPA occur east of the Project area within the A42J sub-quaternary catchment (Figure 10-28).

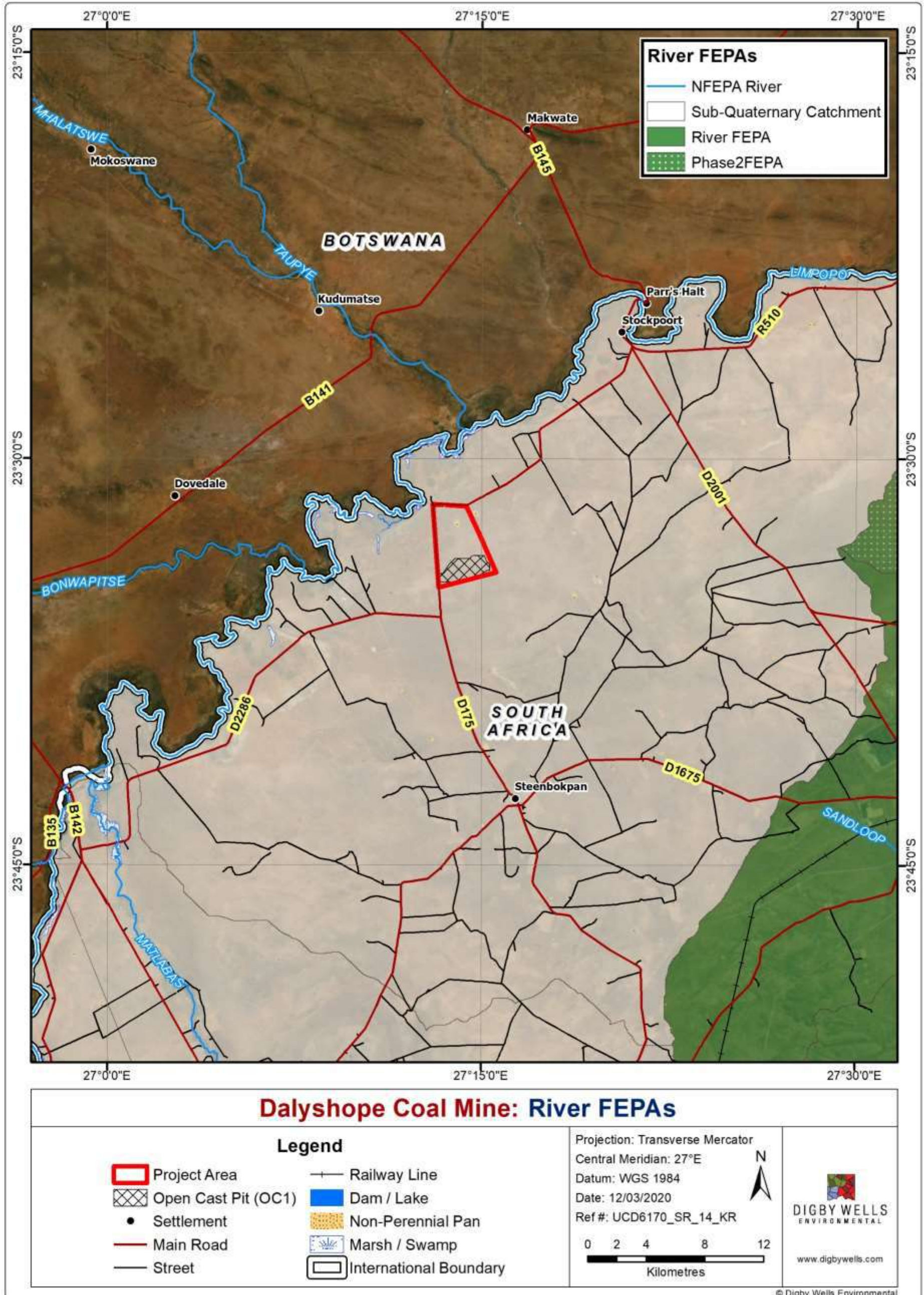


Figure 10-28: River FEPAs

10.10.2 Desktop Present Ecological Status, Importance and Sensitivity

Table 10-11 outlines the desktop aquatic-related data obtained for the Limpopo A41E-00126 SQR (DWS, 2014).

Table 10-11: Desktop aquatic data pertaining to the Limpopo River

SQR Code/Aquatic Component	A41E-00126
Ecological Category	C
Category Description	Moderately Modified
Ecological Importance (EI)	High
Ecological Sensitivity (ES)	High

According to the desktop data obtained for the Limpopo A41E-00126 SQR (DWS, 2014), the reach appears to be in a Moderately Modified state (i.e. Ecological Category C). Game reserves and agricultural land uses are present in the upper reaches of the Limpopo River associated with the Project area. However, impacts such as water abstraction; small dams; overgrazing and trampling; vegetation removal; increased fire frequency; soil erosion and compaction; sedimentation; irrigation as well as inundation and nature reserves appear to be affecting the current aquatic ecology associated with the Limpopo SQR (DWS, 2014).

The Ecological Importance of the Limpopo River SQR has been classified as “High”. It is expected to contain a total of 41 macroinvertebrate taxa as well as a total of 32 indigenous fish species. Twenty-eight fish species are Least Concern (LC) in terms of their conservation status, whilst two are Near Threatened (NT), one is Vulnerable (VU) and there is limited data (Data Deficient; DD) for one species. The Ecological Sensitivity for the SQR has been classified as “High”. This, from an instream perspective, is mainly due to the large number of highly sensitive macroinvertebrate and fish species expected.

10.10.2.1 Expected Macroinvertebrates

The expected macroinvertebrate taxa for the Limpopo River SQR of concern are presented in Table 10-12.

Table 10-12: Expected macroinvertebrate taxa in the Limpopo River

Family names		
Oligochaeta	Belostomatidae	Ceratopogonidae
Hirudinea	Corixidae	Chironomidae
Potamonautidae	Gerridae	Culicidae
Atyidae	Hydrometridae	Muscidae
Hydracarina	Naucoridae	Simuliidae
Baetidae > 2 sp	Nepidae	Tabanidae

Family names		
Caenidae	Notonectidae	Lymnaeidae
Leptophlebiidae	Pleidae	Physidae
Tricorythidae	Veliidae / Mesoveliidae	Planorbinae
Coenagrionidae	Hydropsychidae 2 sp	Thiaridae
Aeshnidae	Leptoceridae	Corbiculidae
Corduliidae	Dytiscidae	Sphaeriidae
Gomphidae	Gyrinidae	Unionidae
Libellulidae	Hydrophilidae	
Oligochaeta	Belostomatidae	

Blue shading indicates high-velocity dependence;
Orange indicates high physio-chemical sensitivity and velocity dependence.

Of the 41 expected macroinvertebrate taxa at the Limpopo SQR, seven have been classified as highly sensitive with regards to water quality and velocity/flow dependence (DWS, 2014). Of the seven taxa, two are regarded as sensitive towards both water quality changes and flow conditions, whilst the rest are regarded as sensitive to flow conditions only (i.e. high preference for fast-flowing water).

Based on the absence of mining and sparse agricultural land use in the adjacent land areas associated with the Project area, the water in the associated aquatic ecosystems is expected to be of “small” modification (DWS, 2014). As a result of this deduction it is suspected that the watercourses associated with the Project area will inhabit macroinvertebrate taxa sensitive towards water quality, such as numerous Baetidae species.

10.10.2.2 Expected Fish Species

The fish species expected in the reaches associated with the Project area have been provided for in Table 10-13 (DWS, 2014). Additionally, each species sensitivity ratings towards physio-chemical and no-flow conditions (DWS, 2014) have been provided for, together with their conservation status as per the IUCN Red List of Threatened Species (2018).


Table 10-13: Expected fish species in the Project area

Fish Species	Common Name	Tolerant/Sensitivity		Conservation Status
		Physico-chemical	No-flow	
<i>Micropanchax johnstoni</i>	Johnston's Topminnow	3.8	1.5	LC
<i>Anguilla bengalensis labiata</i>	Indian Mottled Eel	2.7	2.8	NT
<i>Anguilla marmorata</i>	Marbled Eel	2.5	2.8	LC
<i>Anguilla mossambica</i>	African Longfin Eel	2.5	2.8	NT
<i>Enteromius annectens</i>	Broadstriped Barb	3	2.8	LC
<i>Enteromius bifrenatus</i>	Hyphen Barb	3	2.5	LC
<i>Enteromius afrohamiltoni</i>	Hamiltoni's Barb	2.5	2.8	LC
<i>Brycinus imberi</i>	Spot-tail Robber	3.2	3	LC
<i>Labeobarbus marequensis</i>	Lowveld Largescale Yellowfish	2.1	3.2	LC
<i>Enteromius mattozi</i>	Papermouth	3.2	3	LC
<i>Enteromius paludinosus</i>	Straighfin Barb	1.8	2.3	LC
<i>Enteromius radiatus</i>	Redeye Barb	1.4	2.8	LC
<i>Enteromius trimaculatus</i>	Threespot Barb	1.8	2.7	LC
<i>Enteromius unitaeniatus</i>	Longbeard barb	2.2	2.3	LC
<i>Enteromius viviparus</i>	Bowstripe barb	3	2.3	LC
<i>Chetia flaviventris</i>	Canary kurper	2	1.3	LC
<i>Clarias gariepinus</i>	Sharptooth Catfish	1	1.7	LC
<i>Chiloglanis paratus</i>	Sawfin Suckermouth	-	-	LC
<i>Labeo cylindricus</i>	African Carp	3.1	3.1	LC
<i>Labeo molybdinus</i>	Leaden Labeo	3.2	3.3	LC
<i>Labeo rosae</i>	Rednose Labeo	-	-	LC
<i>Labeo rudd</i>	Silver Labeo	3	2.9	DD
<i>Micralestes acutidens</i>	Sharptooth Tetra	3.1	3.1	LC
<i>Engraulicypris brevianalis</i>	River Sardine	2.8	1.1	LC
<i>Marcusenius pongolensis</i>	Bulldog	3.4	3	LC

Fish Species	Common Name	Tolerant/Sensitivity		Conservation Status
		Physico-chemical	No-flow	
<i>Oreochromis mossambicus</i>	Mozambique Tilapia	-	-	VU
<i>Petrocephalus wesselsi</i>	Southern Churchill	-	-	LC
<i>Pseudocrenilabrus philander</i>	Southern Mouthbrooder	-	-	LC
<i>Schilbe intermedius</i>	Butter Catfish	-	-	LC
<i>Synodontis zambezensis</i>	Brown Squeaker	-	-	LC
<i>Tilapia rendalli</i>	Redbreast Tilapia	2.1	1.8	LC
<i>Tilapia sparrmanii</i>	Banded Tilapia	-	-	LC

Tolerance: 1-2 = tolerant, 4-5 = sensitive,
Conservation Status: LC=Least Concern, NT=Near Threatened, DD=Data Deficient

A total of 32 fish species are expected to occur within the Limpopo River SQR A41E-00126 (DWS, 2014). According to Skelton (2001), all the species are indigenous to South Africa. Eleven of the 32 species are regarded as moderately intolerant towards water quality changes, seven are moderately intolerant towards changes in flow conditions and six are moderately intolerant towards changes in water quality and flow conditions.

10.11 Air Quality

Figure 10-29 shows the Project boundary, surrounding sensitive receptor and dust monitoring points. In Google Earth® Imagery, isolated homesteads are noticeably scattered around the landscape. These were selected as sensitive receptors. According to the United States Environmental Protection Agency (USEPA) (2016), a sensitive receptor encompasses but is not limited to “hospitals, schools, day-care facilities, elderly housing, and convalescent facilities. These are areas where the occupants are more susceptible to pollutants”.

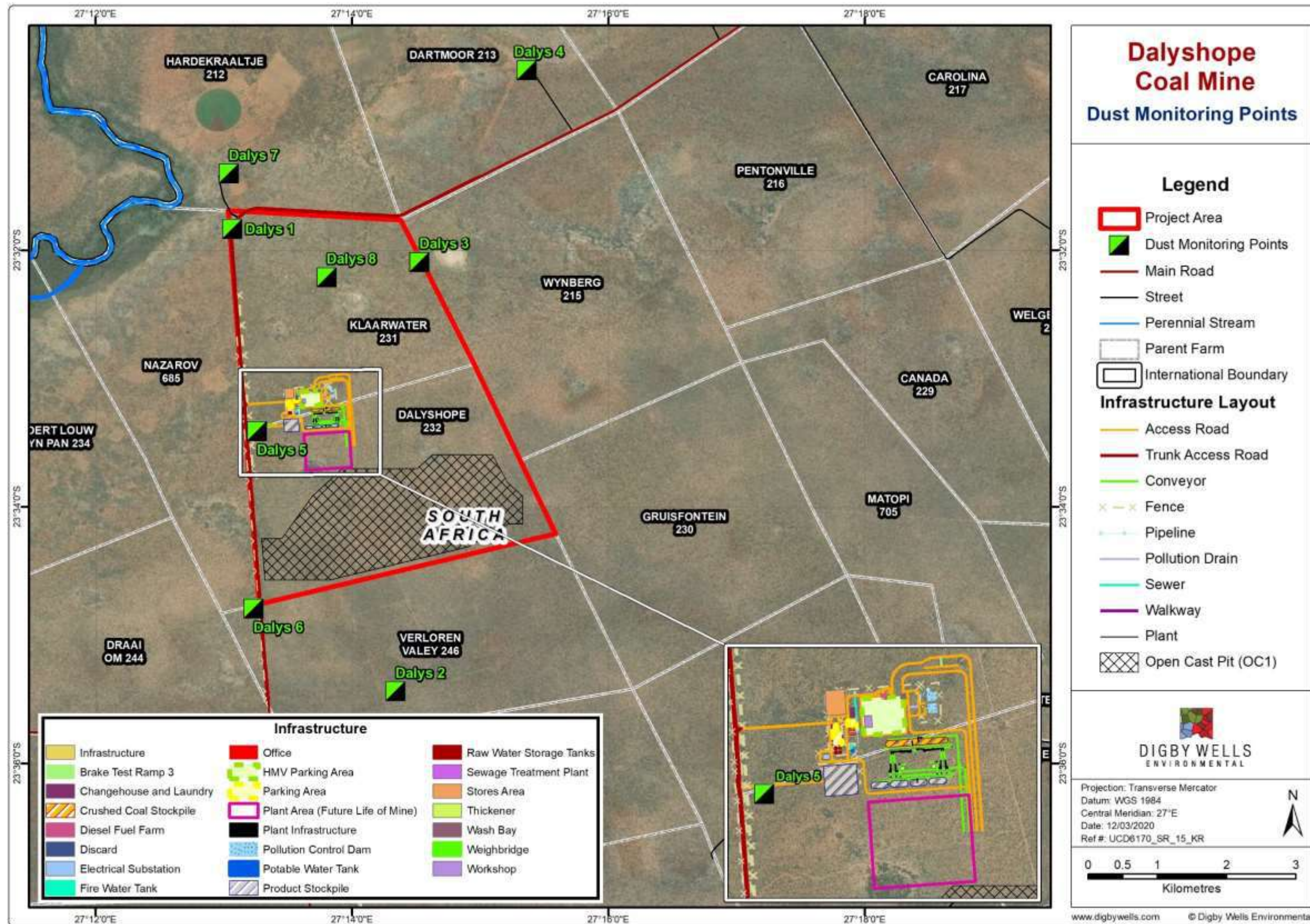


Figure 10-29: Project Boundary Showing Surrounding Receptors and Monitoring Site

10.11.1 Existing Air Quality

10.11.1.1 Total Suspended Particulate

Archived dust deposition data collected using the American Standard Test Method (ASTM) D1739 for the area was used to assess background scenarios in the Project area. One years' worth of dustfall data from eight sites was obtained and the graph showing the results is depicted below (Figure 10-30). Since mining has not commenced, the monitoring sites were categorised as residential. Once mining commences, the sites will be reclassified as non-residential. The dustfall rates were compared with the South African Government Notice 827 in Gazette 36974, 1 November 2013 Dust Control Regulations. For a site where exceedances of the residential limits were measured, the reasons for the exceedances after investigation are provided below, in sequential order:

- Dalys 4: was in exceedance in April (**1 871** mg/m²d), October (**8441** mg/m²/d), December (792 mg/m²d), and February 2014 (915 mg/m²d) respectively. These are exceedances above the residential and non-residential limit values. Investigation on this site found that cattle were being transferred from one area to another. This localised activity resulted in particulates being airborne, deposited and re-suspended. This led to the high dustfall rates measured on-site; and
- For the other sites, exceedances were observed at Dalys 1 in January (**661** mg/m²d), Dalys 5 in February (627 mg/m²d) and Dalys 7 in October (**1524** mg/m²d).

10.11.1.2 PM₁₀

The real-time particulate monitor has not been deployed. The aim is to have the equipment installed for a month, plans will be in place to have this done before the EIA, for a period of one month. Once this survey is conducted, this will be used to comprehensively assess daily PM₁₀ variability on site.

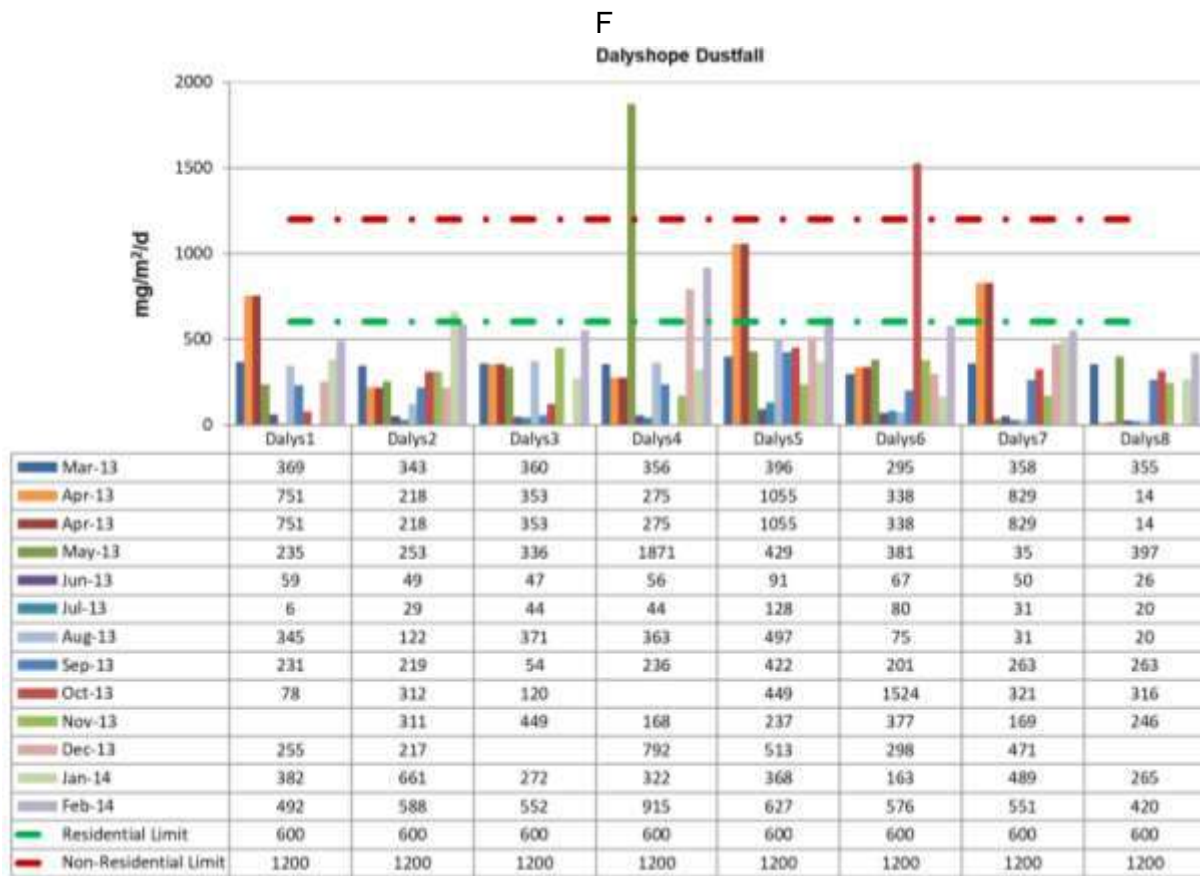


Figure 10-30: Dalyshope Dustfall Data

10.12 Noise

The soundscape of the proposed Project area is characterised by measurements taken at selected receptors in the area likely to be impacted. Data encompasses both daytime and night-time measurements.

Figure 10-31 shows the Project boundary, surrounding sensitive receptor and noise monitoring points. The noise employed historical measurement collected in 2013. A visit to the area confirms the status quo is still the same and this was confirmed in recent Google Earth® Imagery of the Project area.

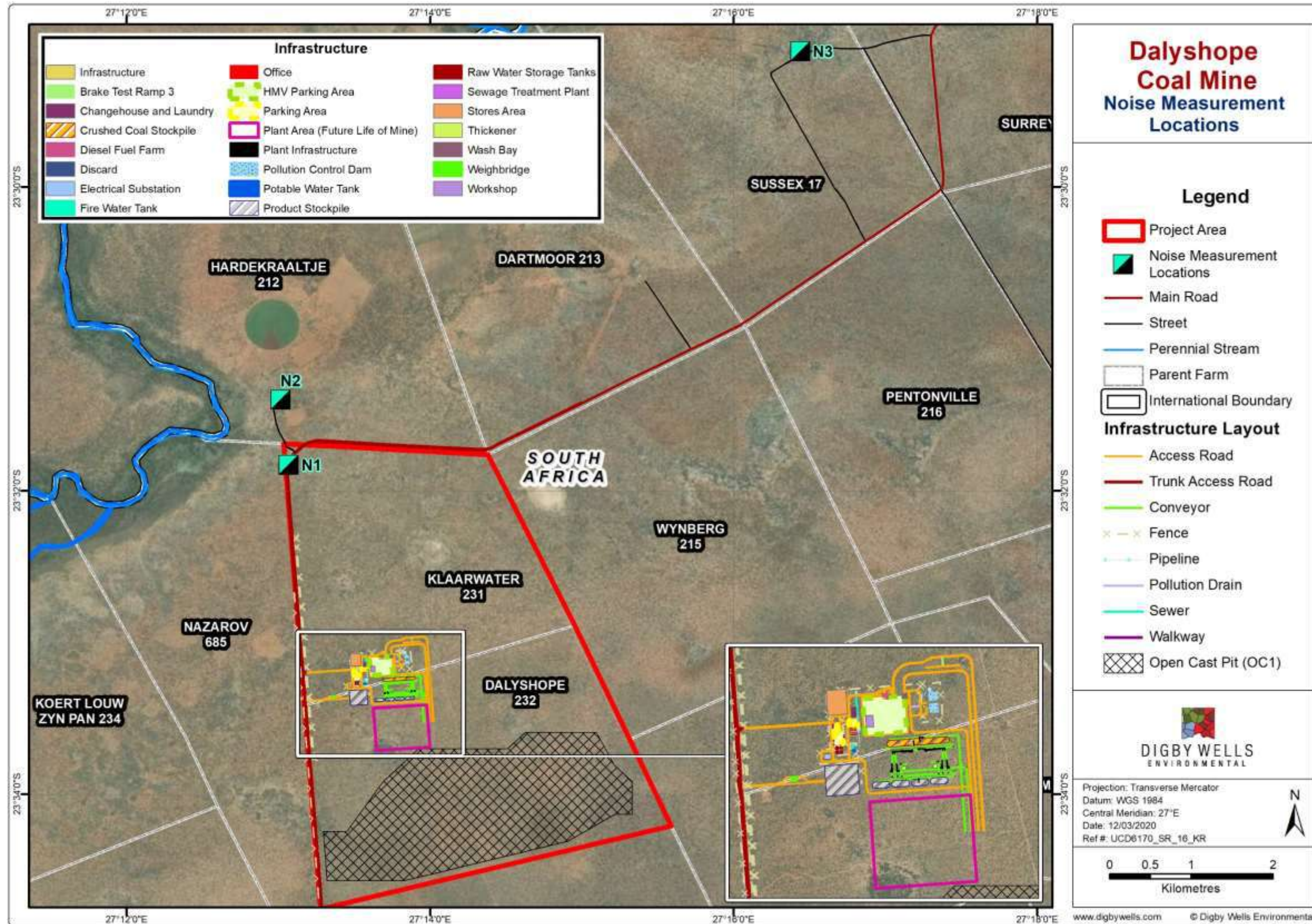


Figure 10-31: Noise Measurement Location

10.12.1 Existing Soundscape in the Project Area

The approach followed in the data collection was aligned with the requirements of the noise control regulations as published under R.154 of 1992 in terms of section 25 of the Environmental Conservation Act, 1989 (Act No. 73 of 1989) and the guidelines provided by SANS 10103:2008. According to the SANS 10103:2008, the sound pressure level is used as the measurement unit for noise levels. The acceptable rating levels according to SANS 10103:2008 for ambient noise in different districts (residential and non-residential) are presented in Table 10-14 below.

Table 10-14: Acceptable Rating Levels for Noise in Districts (SANS 10103, 2008)

Type of District	Equivalent continuous rating level ($L_{Req,T}$) for noise (Decibels) (dBA)					
	Outdoors			Indoors, with open windows		
	Day-night	Daytime	Night-time	Day-night	Daytime	Night-time
	$L_{R,dn}^a$	$L_{Req,d}^b$	$L_{Req,n}^b$	$L_{R,dn}^a$	$L_{Req,d}^b$	$L_{Req,n}^b$
RESIDENTIAL DISTRICTS						
a) Rural districts	45	45	35	35	35	25
b) Suburban districts with little road traffic	50	50	40	40	40	30
c) Urban districts	55	55	45	45	45	35
NON-RESIDENTIAL DISTRICTS						
d) Urban districts with some workshops, with business premises, and with main roads	60	60	50	50	50	40
e) Central business districts	65	65	55	55	55	45
f) Industrial districts	70	70	60	60	60	50
NOTE 1 If the measurement or calculation time interval is considerably shorter than the reference time intervals, significant deviations from the values given in the table might result.						
NOTE 2 If the spectrum of the sound contains significant low frequency components, or when an unbalanced spectrum towards the low frequencies is suspected, special precautions should be taken, and specialist advice should be obtained. In this case the indoor sound levels might significantly differ from the values given in columns 5 to 7						
NOTE 3 In districts where outdoor $L_{R,dn}$ exceeds 55 dBA, residential buildings (e.g. dormitories, hotel accommodation and residences) should preferably be treated acoustically to obtain indoor $L_{Req,T}$ values in line with those given in table 1.						
NOTE 4 For industrial districts, the $L_{R,dn}$ concept does not necessarily hold. For industries legitimately						

Type of District	Equivalent continuous rating level ($L_{Req,T}$) for noise (Decibels) (dBA)					
	Outdoors			Indoors, with open windows		
	Day-night	Daytime	Night-time	Day-night	Daytime	Night-time
	$L_{R,dn}^a$	$L_{Req,d}^b$	$L_{Req,n}^b$	$L_{R,dn}^a$	$L_{Req,d}^b$	$L_{Req,n}^b$
operating in an industrial district during the entire 24 h day/night cycle, $L_{Req,d} = L_{Req,n} = 70$ dBA can be considered as typical and normal.						
NOTE 5 The values given in columns 2 and 5 in this table are equivalent continuous rating levels and include corrections for tonal character, impulsiveness of the noise and the time of day.						
NOTE 6 The noise from individual noise sources produced, or caused to be produced, by humans within natural quiet spaces such as nature reserves, private game farms, national parks, wilderness areas and bird sanctuaries, should not exceed a maximum Weighted sound pressure level of 50 dBA at a distance of 15 m from each individual source.						
A - The values given in columns 2 and 5 are equivalent continuous rating levels and include corrections for tonal character and impulsiveness of the noise and the time of day.						
B - The values given in columns 3, 4, 6 and 7 are equivalent continuous rating levels and include corrections for tonal character and impulsiveness.						
C – $L_{Req,T}$ is the equivalent continuous A-weighted sound pressure level ($L_{Aeq,T}$) during a specified time interval, plus specified adjustments for tonal character, impulsiveness of the sound and the time of day.						
D – dBA 'A-weighted' is a standard weighting of the audible frequencies designed to reflect the response of the human ear to noise.						

A baseline assessment survey was undertaken to determine the ambient noise levels at surrounding residential dwellings i.e. farmhouses in the vicinity that may possibly be impacted on by the proposed Project. The list of noise measurement locations can be seen in Table 10-15. A Cirrus, Optimus Green, precision integrating sound level meter was used for the measurements. The instrument was field calibrated with a Cirrus, sound level calibrator. The baseline locations are presented in Table 10-15 below.

Table 10-15: Noise Measurement Locations

Site ID	Farm/location	Category of receiver	GPS coordinates
N1	Klaarwater 231 LQ	Rural	23°31'49.72"S & 27°13'4.14"E
N2	Hardekraaltje 212 LQ	Rural	23°31'23.87"S & 27°13'1.06"E
N3	Sussex 17 LQ	Rural	23°29'6.19"S & 27°16'26.57"E

The results of the baseline measurements together with the rating limits according to the SANS 10103:2008 guidelines are presented in Table 10-16 below. The noise level time history graph per noise measurement location can be seen in Figure 10-32 to Figure 10-34.

Table 10-16: Results of the Baseline Noise Measurements

Sample ID	SANS 10103:2008 rating limit					
	Type of district	Period	Acceptable rating level dBA	L _{Aeq, T} dBA	Maximum/Minimum dBA	Date
N1	Rural	Daytime	45	43	82 / 21	12/03/2013
		Night-time	35	40	79 / 17	12/03/2013
N2	Rural	Daytime	45	38	77 / 20	13/03/2013
		Night-time	35	35	63 / 18	13/03/2013
N3	Rural	Daytime	45	43	77 / 20	14/03/2013
		Night-time	35	43	64 / 21	14/03/2013
	Indicates current L _{Aeq, T} levels above either the daytime rating limit or the night-time rating limit					

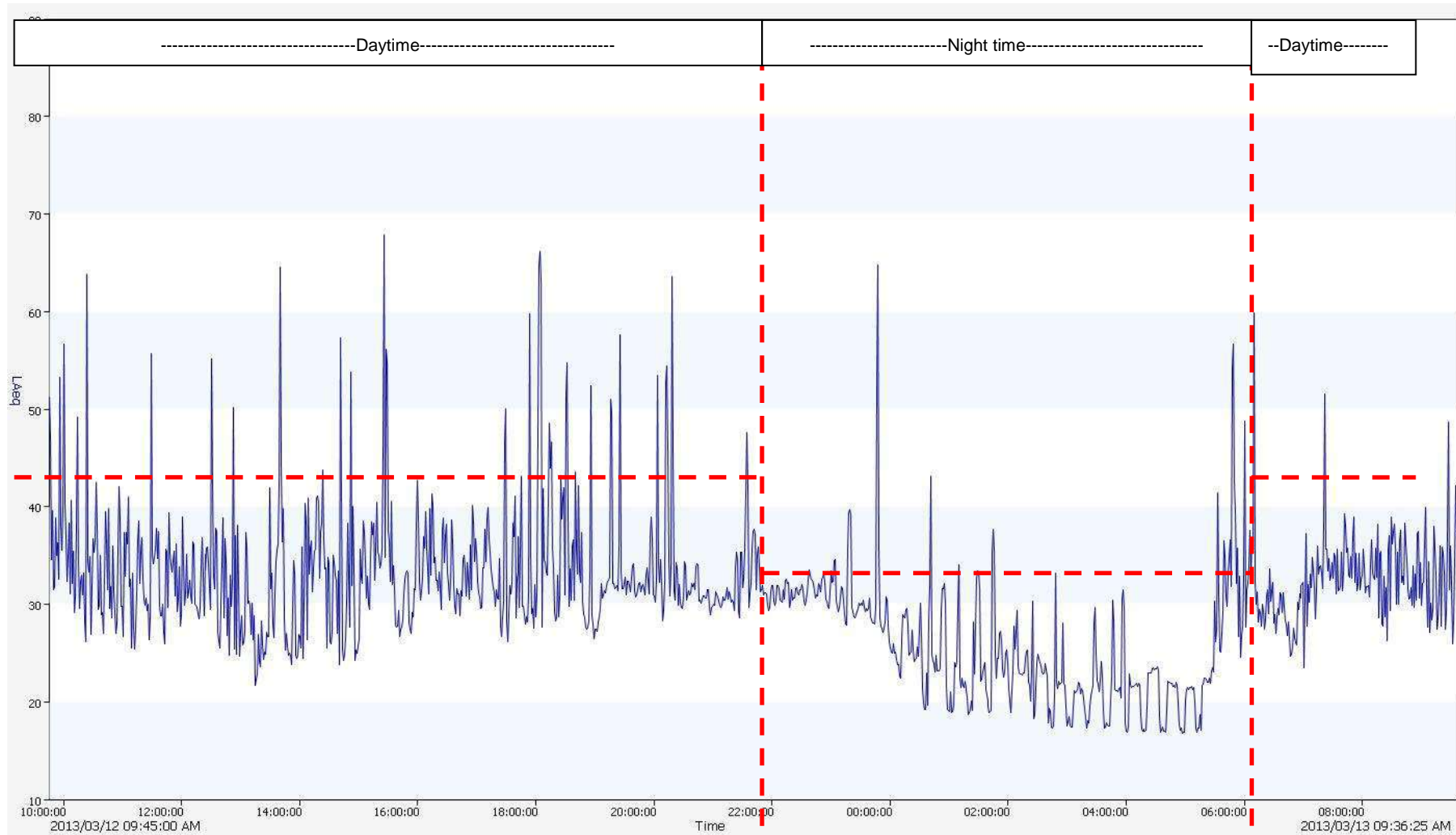


Figure 10-32: Noise Graph for N1

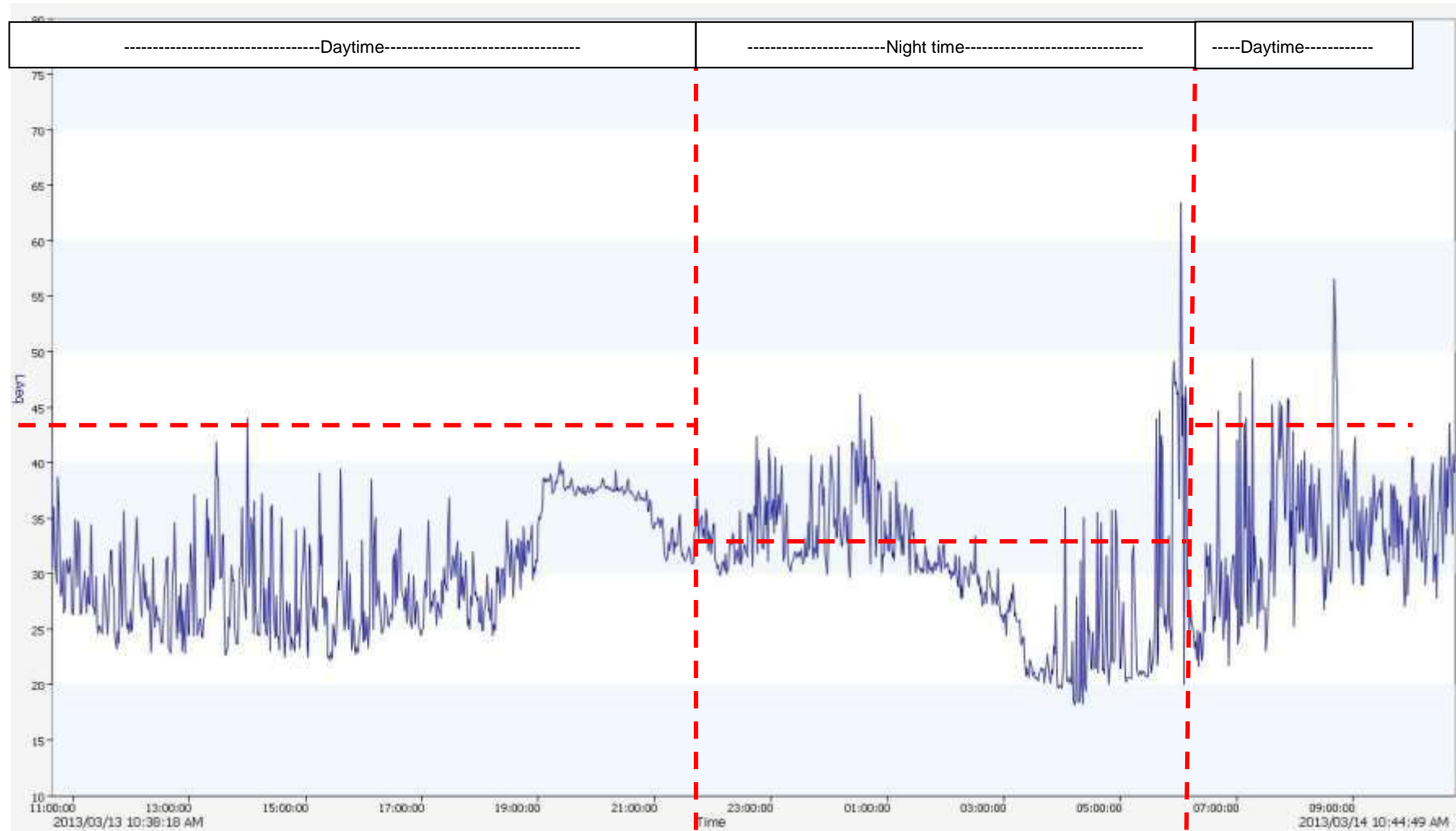


Figure 10-33: Noise Graph for N2

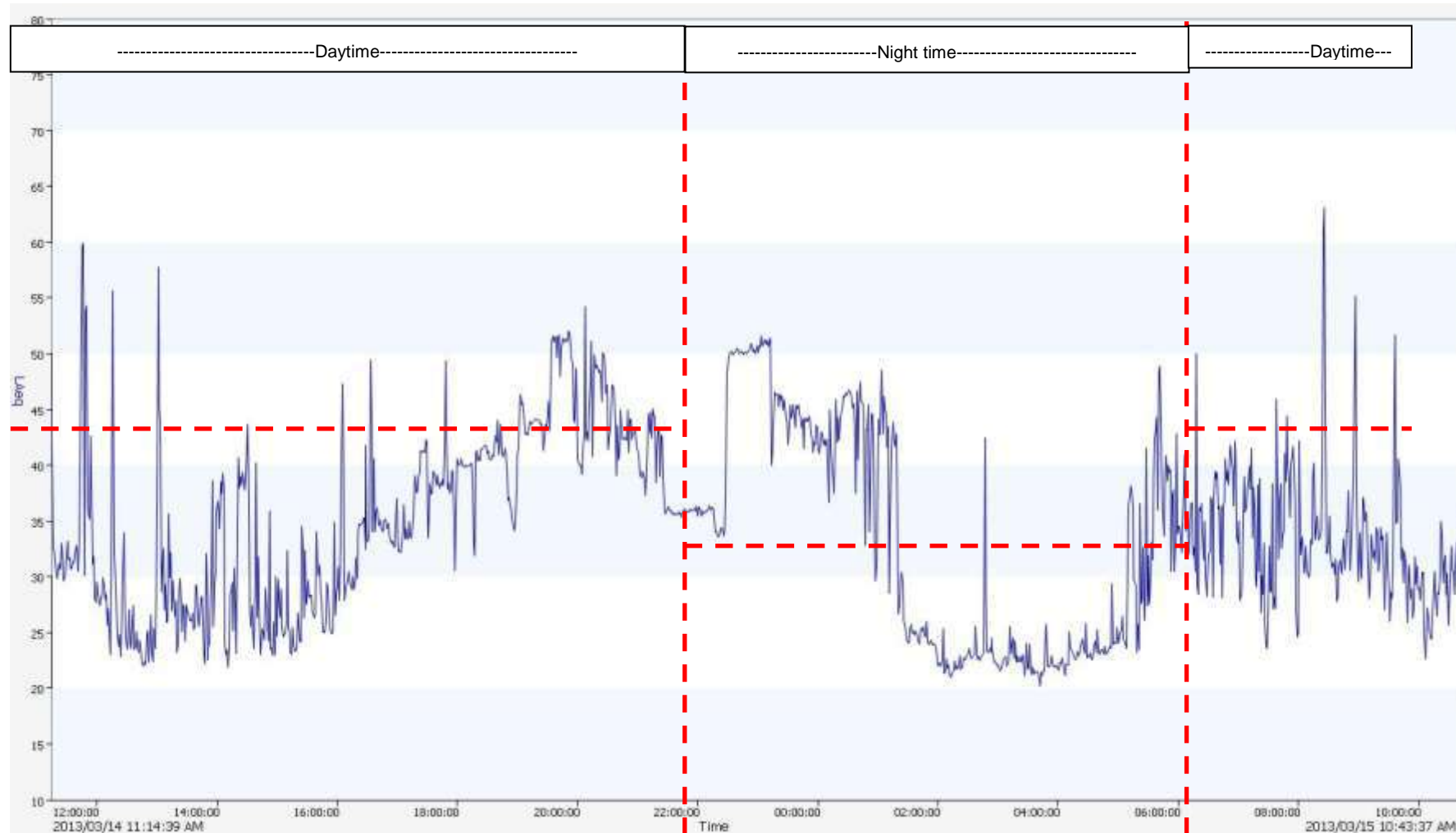


Figure 10-34: Noise Graph N3

10.12.1.1 Daytime Results

The average daytime ambient noise level is 41dBA. The daytime noise levels at the different measurement locations were all below the SANS guidelines rating limit of 45dBA allowable outdoor in rural districts. The main noise sources in the area during daytime are the farm vehicles used for the farming activities, coupled with intermittent vehicular activity on the D175 road as well as continuous birdsong.

10.12.1.2 Night-time Results

The average night-time ambient noise level is 39dBA. The night-time noise levels indicate that the ambient night-time levels are above the SANS guidelines rating levels of 35dBA allowable outdoor in rural districts. The main noise sources influencing the night-time sound levels at the various measurement locations were the Cicada and Gryllidae.

A summary of the noise sources that were audible during the baseline survey, which were contributors to the background soundscape during the day and night times are depicted in Table 10-17.

Table 10-17: Noise Sources During Baseline Measurements

Noise source description			
Day	Duration	Night	Duration
Birdsong	Continuous	<i>Gryllidae</i> (crickets)	Continuous
Tractors and farm vehicles	Intermittent	Cicada	Continuous
Vehicular activity on the D175 road	Intermittent	Vehicular activity on the D175	Intermittent

10.13 Heritage

The Project area overlies the Waterberg Basin and the Ellisras Basin. These features include lithologies of the Karoo Supergroup and the Waterberg Group respectively.

The Waterberg Group is thought to be deposited between 2 000 and 1 700 million years ago (mya) in succession with two other geological formations (Johnson, Anhaessler, & Thomas, 2006). This period represents the first time in the Earth's geological past where free oxygen was available in large enough quantities to result in the oxidation of ferruginous metals. This resulted in the formation of deposits referred to as "red beds".

The Waterberg Group is divided into three subgroups: the Nylstroom, Matlabas and Kransberg Subgroups (Johnson, Anhaessler, & Thomas, 2006). Within the regional Project area, the Kransberg Subgroup represents the Waterberg Group. The Kransberg Subgroup consists of four formations: the *Mogalakwena*, *Sandriversberg*, *Cleremont* and *Vaalwater Formations*. These formations consist of sandstones and conglomerates with minor mudrocks. The geomorphology of these deposits suggests they were formed within braided stream environments, and may include beach, lacustrine and tidal flat or marine shelf

deposits as well as Aeolian deposits (Johnson, Anhaessler, & Thomas, 2006; SAHRA, 2013). All four of these formations are considered of low palaeontological sensitivity although they have the potential to include fossilised terrestrial cyanobacterial mats from playa lake deposits (SAHRA, 2013).

The Ellisras Basin consists of deposits representing seven formations of the Karoo Supergroup and of varying palaeosensitivity and different depositional environments. Table 10-18 includes a description of these formations, from oldest to most recent (Johnson, Anhaessler, & Thomas, 2006; SAHRA, 2013; Groenewald & Groenewald, 2014). Table 10-19 shows the truncated geological sequence and palaeontological sensitivity for the local study area. Table 10-20 presents an overview of the broad timeframes for the major periods of the past in South Africa.

Table 10-18: Description of the Formations within the Ellisras Basin

Formation	Description
<i>Waterkloof</i>	The basal unit of the Ellisras Formation, these layers lie unconformably on Waterberg and pre-Waterberg rocks. The unit comprises diamictite and conglomerates which appear to have been deposited in a glaciolacustrine environments ahead of retreating glaciers.
<i>Wellington</i>	A unit developed only in the southern portion of the Ellisras Basin. This unit is characterised by mudstone and siltstone with some sandstone lenses and scattered granule-sized clasts. This unit represents suspension deposits which were formed in a large body of standing water. The scattered granules may represent 'rain out' episodes derived from drifting ice.
<i>Swartrant</i>	This unit reaches a maximum thickness of 130 m and has been divided into three zones. Collectively, these zones include layers of mudstones, siltstones and sandstones in repetitive layers. The upper zone may represent a depositional crevasse-play environment with deposits also occurring as infills of small channels and isolated swamps. The middle zone appears to have been formed through a glaciolacustrine environment with scattered icebergs. The lower zone appears to have been formed through a delta front which formed through the east.
<i>Goedgedacht</i>	This unit occurs only in the central and northern parts of the Ellisras Basin. This unit consists of mudstones and includes angular grains of quartz, intraformational clay pellets and impure coal. The depositional environment was most likely a proglacial environment with depositional action undertaken by braided streams on the fan surface.

Formation	Description
<i>Grootegeluk</i>	The most economically important unit in the Ellisras Basin, as it includes several thick coal seams. This unit consists of coal, carbonaceous shale and mudstone and imprints of <i>Glossopteris</i> ² flora is common throughout this formation. These layers were most likely deposited in an environment characterised by poorly drained swamps which led to the formation of peat. This maximum thickness of this layer is 110 m and, in the central and northern areas, it interdigitates with the <i>Goedgedacht Formation</i> .
<i>Eendragtpan</i>	Geological layers composed entirely of variegated mudstones with scattered white reduction spots occurring throughout. This formation signifies a change in environment from the <i>Grootegeluk Formation</i> through the complete absence of coal as well as changes in colour. These mudstones are reddish and, towards the top of the feature, more purplish. This suggests that the layers were deposited in oxidising conditions under subaerial conditions. The depositional environment was most likely a low-energy, well-drained environment such as a flood-basin or floodplain.
<i>Greenwich</i>	This formation comprises mainly of sandstone or granulestone with local, thin conglomerate lenses and thin intercalations of mudstones may also be present. The thickness of this layer ranges from 7 m to 33 m and appear to have been formed as channel deposits from braided streams.
<i>Lisbon</i>	A succession of (dominantly red) mudstone and siltstone, the latter of which includes many calcareous concentrations. These deposits may have been created through deposition on an extensive floodplain by meandering rivers, although some deposits appear to be Aeolian in nature. The red colour and lack of plant material indicate that these layers were formed in dry and warm (oxidising) conditions.
<i>Clarens</i>	Predominantly comprised of sandstones, these deposits appear to comprise Aeolian deposits. Some deposits may have been created by small, ephemeral streams.

²Plant species which occur together and are typified by the dominant fossil leaves that belong to the glossopterid group

Table 10-19: Truncated geological sequence and palaeontological sensitivity for the local study area

Eon	Era	Period	MYA	Lithographic Units				Significance	Fossils		
				Supergroup	Group	Subgroup	Formation				
Phanerozoic	Mesozoic	Triassic	180	Karoo Supergroup (Ellisras Basin)	"Stormberg"	[Redacted]	Clarens	High	Dinosaur remains and tracks are expected within this unit. The levels of surface exposure are very poor, however, and most data comes from borehole cores.		
							Lisbon	Very High	Potential fossils include large sauropodomorph dinosaurs (such as <i>Euskelsaurus</i>). There are records of dinosaur remains identified in this unit from the 1920s. Trace fossils include extension bioturbation, possible fossil termitaria, rhizoliths and evidence of <i>Cruziana</i> and <i>Skolithos</i> . Exposure levels are generally very poor.		
							Greenwich	Moderate	No coal seams present within these formations, but plant fossils are still possible.		
							Beaufort	Moderate			
							Ecca	Very High	Abundant Glossopterid coal flora. This is associated with the thick coal seams.		
	Palaeozoic	Permian	325						Goedgedracht	Very High	Some <i>Stigmara</i> roots have been recorded within the <i>Swartrant Formation</i> (Bamford, 2018).
									Swartrant	Very High	
									Wellington	Moderate	
									Dwyka	Moderate	No fossils recorded to date, but the presence of Glossopterid fossilised flora is possible.
									Waterkloof	Moderate	

Eon	Era	Period	MYA	Lithographic Units				Significance	Fossils
				Supergroup	Group	Subgroup	Formation		
Proterozoic	Mokolian	Kheisian	1700	█	Waterberg	Kransberg	Vaalwater	Low	Terrestrial cyanobacterial mats recorded from playa lake deposits. The earliest known terrestrial cyanobacterial mats were recorded from the playa lake deposits of the <i>Makgabeng Formation</i> (Matlabas Subgroup). Early Proterozoic 'red beds' provide evidence for the development of an oxygenated atmosphere after approximately 2 000 mya.
							Cleremont	Low	
							Sandriversberg	Low	
							Mogalakwena,	Low	
			Matlabas			█	Low		
			Nylstroom			█	Low		
2000									

Adapted from Groenewald and Groenewald (Palaeontological Heritage of Limpopo, 2014) and SAHRA (SAHRIS Fossil Heritage Layer Browser, 2013)

Table 10-20: Archaeological Periods in South Africa

The Stone Age	Earlier Stone Age (ESA)	2 mya to 250 thousand years ago (kya)
	Middle Stone Age (MSA)	250 kya to 20 kya
	Later Stone Age (LSA)	20 kya to 500 CE (Common Era ³)
Farming Communities	Early Farming communities (EFC)	500 to 1400 CE
	Late Farming Communities (LFC)	1100 to 1800 CE
Historical Period	-	1500 CE to 1850 (Behrens & Swanepoel, 2008)

Adapted from Esterhuysen & Smith (Stories in stone, 2007)

During a review of available previously completed heritage assessments, 270 heritage resources were identified within the regional, local and site-specific study areas. Figure 10-35 illustrates the breakdown of the identified heritage resources. Expressions of resources representing with palaeontological, LSA, LFC and historical periods have been recorded within the greater study area. However, the MSA and burial grounds and graves, dominate the tangible heritage resources identified within the area under consideration.

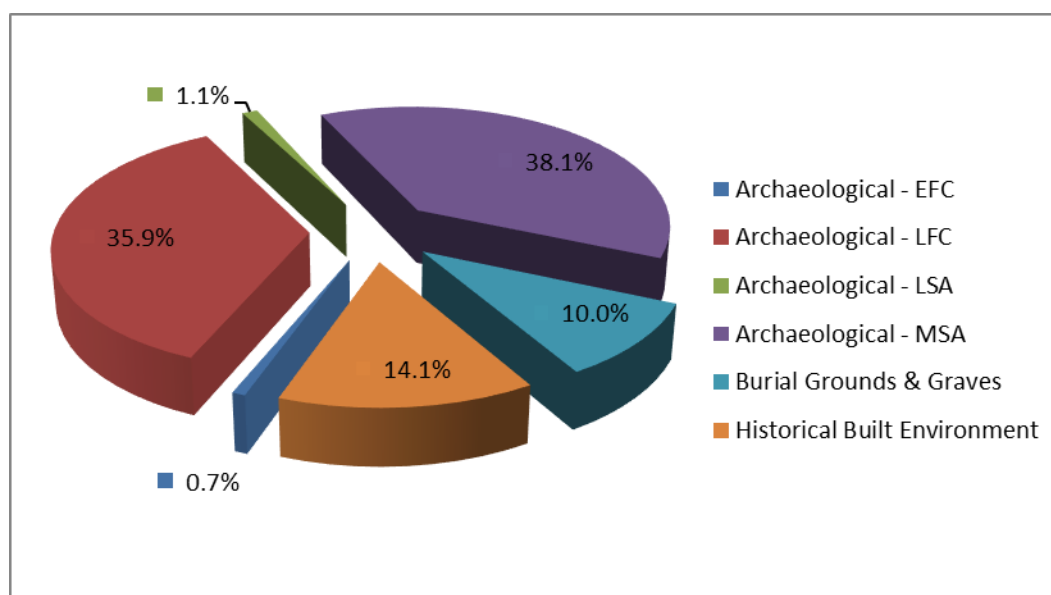


Figure 10-35: Heritage resources identified within the greater study area

³ Common Era (CE) refers to the same period as *Anno Domini* ("In the year of our Lord", referred to as AD): i.e. the time after the accepted year of the birth of Jesus Christ and which forms the basis of the Julian and Gregorian calendars. Years before this time are referred to as 'Before Christ' (BC) or, here, BCE (Before Common Era).

10.13.1 Site-Specific Cultural Heritage Landscape

Digby Wells undertook an extensive pre-disturbance survey of the Project area between 12 and 19 November 2012 and 5 to 7 August 2013 as part of a prior HRM process⁴. The Farms Klaarwater 231 LQ and Dalyshope 232 LQ were surveyed, as well as neighbouring farms, which are not applicable to the current Project and the results of the surveys on these neighbouring farms are not considered in this report.

Table 10-21 presents a summary of the heritage resources identified at the time.

Table 10-21: Summary of Heritage Resources identified in Pre-Disturbance Survey

Site Name	Description
S.35-001	Isolated Farming Community Period Occurrence. One undiagnostic potsherd found near an animal burrow.
S.35-002	Isolated Farming Community Period Occurrence. One undiagnostic potsherd found near an animal burrow.
S.35-003	Isolated Stone Age Occurrence. One MSA quartzite flake found near an animal burrow.
S.35-004	Isolated Farming Community Period Occurrence. One undiagnostic potsherd found near an animal burrow.
S.35-005	Isolated Stone Age Occurrence. One MSA quartzite flake found near a drill area.
S.35-006	Isolated Stone Age Occurrence. Two MSA quartzite flakes found near an animal burrow.
S.35-007	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.
S.35-008	Isolated Stone Age Occurrence. Two MSA quartzite flakes found on the surface.
S.35-009	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface
S.35-010	Isolated Stone Age Occurrence. Three MSA quartzite flakes found on the surface.
S.35-011	Isolated Stone Age Occurrence. Three MSA quartzite flakes found on the surface near an animal burrow.
S.35-012	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface
S.35-013	Isolated Stone Age Occurrence. One MSA quartzite artefact found on the surface
S.35-014	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface
S.35-015	Isolated Stone Age Occurrence. Two MSA quartzite flakes found on the surface.
S.35-016	Isolated Farming Community Period Occurrence. Isolated decorated (<i>Mambo</i> facies) undiagnostic potsherd found on the surface at the edge of a floodplain.

⁴ The HRM process was conducted as part of an EIA process in support of the proposed Dalyshope Phase 1 Coal Mine Project. Anglo Operations Limited (Pty) Ltd appointed Digby Wells as the Environmental Assessment Practitioner (EAP) but closed the Project before the final EIA was submitted to the authorities.

Site Name	Description
S.35-017	Isolated Farming Community Period Occurrence. Isolated undiagnostic potsherd found on the surface at the edge of a floodplain.
S.35-018	Isolated Stone Age Occurrence. One quartzite hammerstone found on the surface.
S.35-020	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.
S.35-024	Farming Community Period Open Scatter. Undiagnostic and diagnostic potsherds with associated iron slag fragment identified in a clearing.
S.35-025	Isolated Farming Community Period Occurrence. Two undiagnostic potsherds found near an animal burrow.
S.35-026	Isolated Farming Community Period Occurrence. One undiagnostic potsherd found near an animal burrow
S.35-027	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.
S.35-034	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface
S.35-043	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.
S.35-044	Isolated Farming Community Period Occurrence. One undiagnostic potsherd found near an animal burrow.
S.35-045	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.
S.35-050	Isolated Stone Age Occurrence. One MSA shale flake found on the surface
S.35-051	Isolated Stone Age Occurrence. One MSA shale flake found near an animal burrow.
S.35-052	Isolated Stone Age Occurrence. One MSA quartzite flake found on the surface.

Shannon Hardwick undertook a non-intrusive vehicular and pedestrian verification survey of the affected infrastructure footprints from 11 to 13 February 2020. The survey was recorded as GPS tracks and identified heritage resources were marked as waypoints. Identified heritage resources were also recorded through written notes and photographs.

Table 10-22 provides a description of recently identified heritage resources during the verification survey (refer to Figure 10-36 for the photograph of the identified heritage resources).

Table 10-22: Heritage Resources Identified Through the Pre-Disturbance Survey⁵

Site Name	Description
S.35-069	Isolated Stone Age Occurrence. Heavily weathered lithic found on edge of pan.

⁵ In accordance with SAHRA procedures, the GPS co-ordinates of these heritage resources have not been included in documents available to the public.



Figure 10-36: Results of the Verification Survey showing the Individual lithic identified in the Infrastructure Area (S35.-069)

10.14 Socio-Economic

This section provides the socio-economic baseline of the communities, wards and municipal area associated with the proposed Project (Table 10-23).

Table 10-23: Primary and secondary study areas

Primary Study Area	Secondary Study Areas		
Ward 3	Lephalale Local Municipality (LLM)	Waterberg District Municipality (WDM)	Limpopo Province

10.14.1 Geographical Location of the Site

Table 10-23 above summarises the Project area and the broad geographical setting. The Project is located within the Limpopo Province and it is adjacent to the Limpopo River and the border to Botswana. The Limpopo Province is divided into five district municipalities. Of these, the WDM is the largest district municipality in terms of land size, comprising 35.71% of the provincial land area (Wazimap, 2017). The WDM is sub-divided into five local municipalities, of which the LLM is the largest in terms of land size (Wazimap, 2017).

The Project is situated within the Waterberg Coalfield and the area is relatively undeveloped. The area is characterised by minimally disturbed Bushveld with game and livestock farming, hunting and tourism. Human activity in proximity to the Project includes farmhouses, game lodges, farmworker accommodation and cattle kraals.

The settlements nearest the Project include Makoba (15 km to the northwest and in Botswana), Steenbokpan (approximately 30 km to the south) and Stockpoort (approximately 20 km to the northeast). An informal settlement (Lesedi Tshukudu) is located adjacent to Steenbokpan. The nearest major town is Lephalale, which is approximately 60 km east of the Project.

The Project is further located in Ward 3 of LLM. It must be noted that since 2001, the ward boundaries within LLM have regularly changed and have been reported that they will change once more before or after the 2021 municipal elections. For example, the Project would have been located in Ward 2 if this study was undertaken in 2006 or 2009 and in Ward 1 in 2000. This has implications for the socio-economic data as the shapes, sizes and populations of the wards have changed and the past datasets aggregated to ward level are not readily compatible.

10.14.2 Limpopo Province Development Context

The 2015-2019 Limpopo Development Plan (LDP), in part, outlines the Limpopo Province's contribution to the national Medium-Term Strategic Framework (MTSF) for this period and through to 2030 (Limpopo Provincial Government, 2015). The vision of the province for 2015-2019 is "to fulfil the potential for prosperity in a socially cohesive, sustainable and peaceful manner" (Limpopo Provincial Government, 2015, p. 9). The LDP highlights 14 development outcomes to achieve this vision. These outcomes encompass a range of social and environmental issues with goals for 2030. Meaningful employment with a focus on career development is a key consideration in this document.

The establishment of a new coal line to unlock the coal deposits of the Waterberg is a priority highlighted in the LDP (Limpopo Provincial Government, 2015). This notwithstanding, a second priority is to procure renewable energy and decommission a portion of the aging coal-fired power stations. Both these priorities are included in the province's five-year plan.

The vision and mission of the WDM was revised during the strategic planning session to inform the 2019-2020 IDP document (WDM, 2019). The vision and mission both centre around energy and minerals, as well as ecotourism. The State of the Province Address (SOPA) highlighted the importance of the mining industry in terms of its contribution to the province's Gross Domestic Product (GDP) as well as employment opportunities. The IDP identified the development potential of the mining industry within the WDM. This includes beneficiation, mining tourism, the platinum corridor and a mining logistics hub. The proposed Musina-Makhado Special Economic Zone (SEZ) project was also described in the SOPA. This is a mineral beneficiation project that will result in a projected total investment of approximately R 150 billion and 21 000 jobs for the province. Additional mining projects have been recently completed within the province or are expected to be completed in the near future.

Energy is also included in the LLM long-term vision (LLM, 2019). This vision has been largely influenced by the opportunities presented by the Waterberg Coalfield. The LLM is presently a large contributor to the GDP of the mining industry. This notwithstanding, the

priorities of the municipality are focused towards the creation and maintenance of infrastructure, stakeholder engagement and community development and environmental management. The IDP highlights tourism as an important industry for the municipality, given its natural and archaeological resources. The IDP also addresses the transition to a low-carbon economy as highlighted in the National Development Plan (NDP) through moving away from the use of unsustainable natural resources as well as changing energy generation and water conservation practices.

The importance of job creation, service delivery and infrastructure is highlighted throughout these documents at all three levels (Limpopo Provincial Government, 2015; LLM, 2019; WDM, 2019). Lephale town has been identified as a Provincial Growth Point (PGP) and a Potential Development Area (PDA) (LLM, 2019). Areas close to the nodes within Lephale (Ellisras, Onverwacht and Marapong) have been associated with mining potential but are also strategically placed for future residential development and human settlement.

10.14.3 Population Demographics

The 2011 Census registered 5 404 868 people, or approximately 10.44% of the South African population, residing in the Limpopo province (Statistics South Africa, 2011; Wazimap, 2017). In terms of population, the Vhembe District Municipality is the largest district municipality and includes 1 294 722 people. The WDM is the smallest of the district municipalities by population and includes 679 336 people or 12.57% of the total population of the Limpopo Province. Within the WDM, Lephale is the second largest local municipality in terms of population with 118 865 people (17.50% of the WDM population).

Ward 3 covers an extensive area and is mostly rural in nature. It includes the Medupi Power Station, a portion of the Grootegeluk Coal Mine and several airstrips. There are no major towns within this ward. This notwithstanding, the ward has a relatively large population compared to the other wards in the LLM, although it is not the largest ward.

Table 10-24 provides a summary of the indicative population statistics for the ward under consideration as compared to the secondary study area. Some of the statistics in the following sections will be presented in relation to households, and not per capita.

Table 10-24: Indicative Statistics related to the Population in the broader Study Area

Study Area:	Secondary			Primary
	Limpopo	WDM	LLM	Ward 3
Statistics (2011)				
Population	5 404 868	679 336	118 865	10 836
Size (km ²)	125 806.1	45 315.6	13 826.1	4509.0
Population density (as whole people/km ²)	43	15	9	2
Number of households	1 447 658	191 214	33 599	3 762
Average household size	3.73	3.55	3.54	2.88

Study Area:	Secondary			Primary
Statistics (2011)	Limpopo	WDM	LLM	Ward 3
Number of child-headed households ⁶	20 595	1 896	288	11
Percentage of child-headed households ⁷	1.42	0.99	0.86	0.29

Adapted from Statistics SA (Statistics by Place, 2011) and Wazimap (Wazimap, 2017)

Previous assessments showed an overall decrease in the population of the LLM between 2005 and 2007 and increases in some local municipalities and decreases in others since then. The WDM reported increases in population between 2011 and 2016 (WDM, 2019). This included an increase in the population of the WDM (of 9.78% in this period) as well as population increases in individual local municipalities, including the LLM. The increase in population ranged from 3.4% to 18.02%, considerably higher rate than the provincial growth rate of 0.84% between 2011 and 2016. This was attributed to the presence of a large construction workforce (16 000+) for the Medupi Power Station; and job opportunities arising from the Waterberg Coalfield.

Table 10-25 provides a summary of the racial distribution of the population of the primary and secondary study areas. Across all levels of the study area, the majority population is Black African, followed by White. The "Other" racial groups constitute the smallest portion of the population. The percentage component of Indian/Asian and coloured varies across the study areas, but the coloured population is generally larger than the Indian/Asian population.

Table 10-25: Population of the Broader Study Area by Race (in percentages)

Race	Limpopo	WDM	LLM	Ward 3
Black African	96.7	91.2	90.9	68.4
Coloured	0.3	0.5	0.9	2.0
Indian or Asian	0.3	0.4	0.3	0.6
White	2.6	7.6	7.7	28.6
Other	0.2	0.3	0.3	0.4

Adapted from Wazimap (Wazimap, 2017)

Figure 10-37 presents an overview of the population by age. Across the areas of study, the '75-79', '80-84' and '85+' categories represent the three smallest components of the population. The three largest age components differ between the different areas but include groups between zero and 34 years of age. The population in the ward is generally youthful

⁶ Head of the household is younger than 18 years

⁷ Child-headed households expressed as a percentage of the total number of households in the area.

comprising mostly of people aged 20 to 34 years old compared to the secondary study area level.

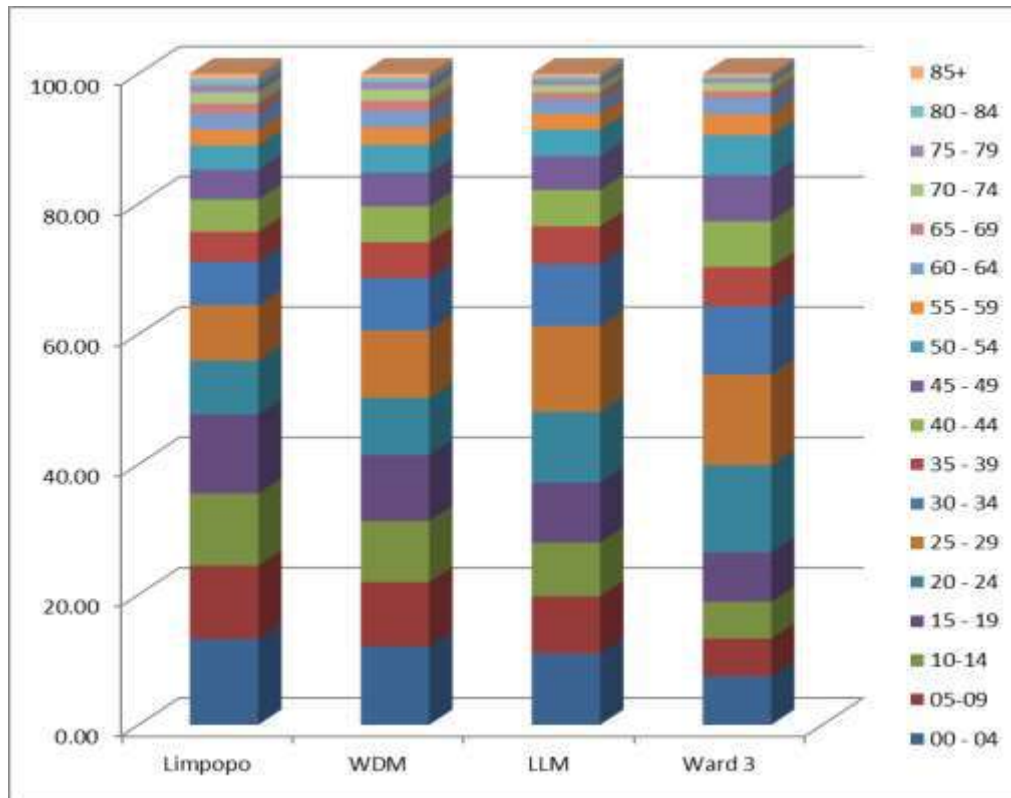


Figure 10-37: Population of the Broader Study Area by Age (in percentages)

Adapted from Wazimap (Wazimap, 2017)

Figure 10-38 presents gender distribution within the population of the greater study area. Gender is divided fairly equally across the study area, with females comprising slightly larger portions of the population. In the Limpopo Province, however, there are more males than females (53.3% of the population is male).

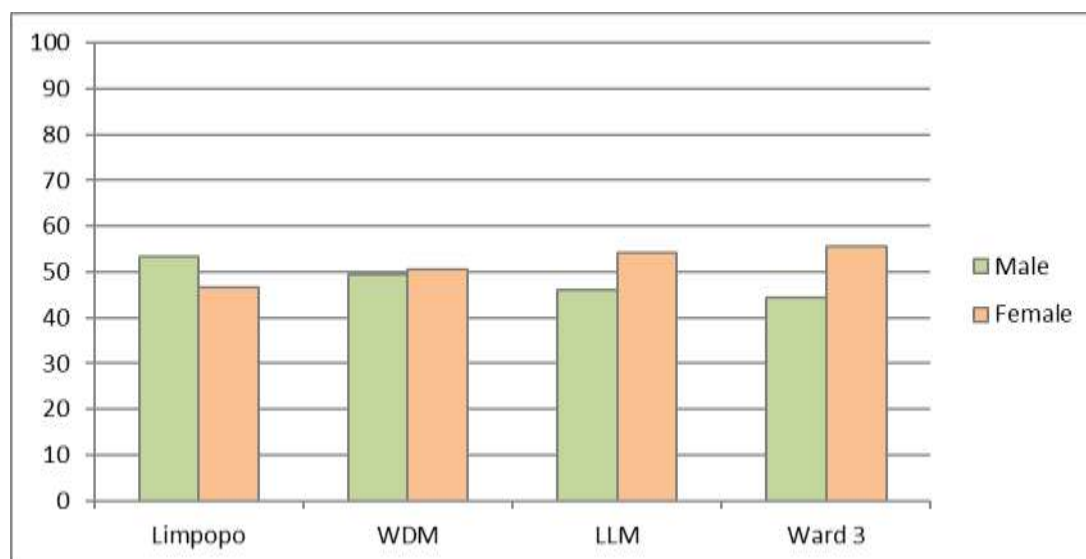


Figure 10-38: Population of the Broader Study Area by Gender (in percentages)

Adapted from Wazimap (Wazimap, 2017)

Table 10-26 provides an overview of the most and least common languages spoken at the various levels of interest. The trends across these areas are very variable. Between 1.29% and 3.54% of the respondents reported they speak 'other' languages as their first language.

Table 10-26: Most and Least Common Home Languages within the Study Areas

Language	Limpopo	WDM	LLM	Ward 3
Most common	Sepedi	Sepedi	Sepedi	Afrikaans
Second-most common	Xitsonga	Setswana	Setswana	Setswana
Third-most common	Tshivenda	Xitsonga	Afrikaans	Sepedi
Least common	Sign Language	Sign Language / SiSwati	Sign Language	Sign Language

10.14.4 Education

The Matric pass rate within the WDM has fluctuated between 2012 to 2018 (WDM, 2019). Within this period, the highest pass rate was 73.6% and the lowest was 57.17%. The matric pass rate for 2018 was 73.14%. Table 10-27 summarises the proportion of the population within the study areas to have completed Grade 9 and Grade 12. This includes only the population older than 20 years old.

Table 10-27: Education Milestones reached by the Population over 20 (in percentages)

Milestone	Limpopo	WDM	LLM	Ward 3
Completed Grade 9	57.76	56.50	54.45	57.94
Completed Matric	30.33	29.51	28.12	37.72

Figure 10-39 presents a breakdown of the highest level of education achieved by the population older than 20 years in the various areas of interest.

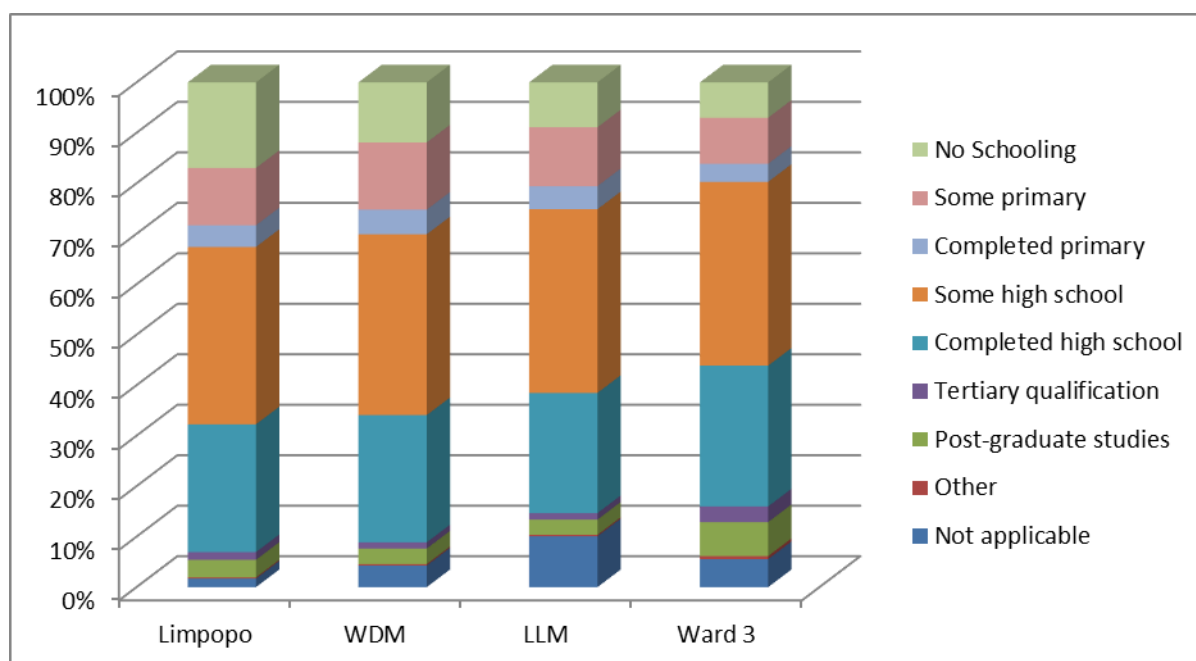


Figure 10-39: Highest Level of Education completed by the Population older than 20 years

Adapted from Wazimap (Wazimap, 2017)

Table 10-28 presents a summary of the number of educational facilities within the LLM and WDM. In addition to these facilities, there are three libraries in the LLM and a total of 14 libraries in the district (WDM, 2019).

Table 10-28: Number of Education Facilities in the LLM and WDM

School Type	LLM	WDM Total
Circuit	3	18
Primary	48	249
Secondary	29	138
Learners with Special Needs (LSEN)	1	5

School Type	LLM	WDM Total
Combined	3	30

10.14.5 Land Tenure

Table 10-29 below presents an overview of these types of land tenure as well as the areas in which they generally apply.

Table 10-29: Types of Land Tenure in the LLM

Tenure Type	Description	Applicability
Private Ownership	The most prevalent form of ownership in the LLM.	Lephalale town, most local service points and all farms
Communal Land Ownership	Ownership of land is vested in the national government, but the land is used by local residents.	All population concentration points and scattered villages
Deed of Grant	A deed of grant refers to a proclamation that has since become obsolete and grants less than full ownership. Since 1994, some of these deeds of grant have been converted to full ownership through the Extended Benefit Scheme.	Marapong

Adapted from the LLM IDP (LLM, 2019)

The Spatial Development Framework (SDF) for the LLM includes a proclaimed land use scheme for the local municipality, but this has not been implemented to date (WDM, 2019).

10.14.6 Major Economic Activities

The key sectors contributing to the WDM economy include agriculture, manufacture, mining and tourism (WDM, 2019). The IDP does not include details on the contribution of all of these sectors to the GDP or the Gross Value Add per Region (GVA-R). Table 10-30 summarises the identified development potential within three of these sectors.

Table 10-30: Developmental Potential within the Major Economic Sectors

Mining	Agriculture	Tourism
Beneficiation; Mining Tourism; Platinum Corridor; and Mining logistics hub.	Game farming; Agro-processing; Meat and horticulture Cluster; and Agro-tourism.	Tourism transport operators; Tour operators; Business tourism; and Theme parks and recreational facilities.

Adapted from the LLM IDP (LLM, 2019)

Within the province, mining activities centre around Mokopane, Lephalale and the Northam-Thabazimbi areas. Minerals mined within the WDM include chrome, coal, iron nickel, platinum, tin, and tungsten. The Waterberg field contains an estimated 76 billion tons of coal, which is more than 40% of the national coal reserve. The WDM produces the most platinum within the Limpopo Province and contributes the most in terms of GDP to the national mining sector.

Mining contributes 47.4% of the WDM GDP. One of the Strategic Implementation Projects (SIPs) is to 'unlock the northern mineral belt with the Waterberg as a catalyst'.

Agriculture is a significant source of employment within the district (WDM, 2019). Predominant crops include cotton, soya beans, sunflower and tobacco. Predominant crops are variable, as fluctuating international prices and the climate influence the success of a crop in terms of yield, profit and sustainability. Alternative crops cultivated in the WDM include groundnuts, Lucerne, paprika, potato and wheat, with varied levels of success and security.

Most crop cultivation within the WDM requires some form of irrigation. This is leading to increased stress on the limited water supply within the district (WDM, 2019). As a result of these water constraints, the cattle and game industry are experiencing transformation in some areas. Areas that have previously been used for dry-land and irrigated farming have now been consolidated and converted for extensive livestock production. Other cultivated land, and land previously used for livestock grazing, has now been converted to game ranching and used for ecotourism. Some game ranch owners are now diversifying into lodges and ecotourism as well.

The WDM, local municipalities and Limpopo Tourism and Parks have established Local Tourism Associations to link government with the tourism industry (WDM, 2019). A lack of resources is a challenge in maintaining such associations. Important tourism hotspots within the WDM include:

- The Waterberg Biosphere Reserve, which forms part of the World Network of Biosphere Reserves and is registered with UNESCO;
- The Makapans Valley, a historical site of a siege event between Trekboers and the Ndebele;
- The Nylsvley Wetland, which is a registered Ramsar site and covers approximately 16 000 ha; and
- Bela-Bela, which is a tourist town originally known as Warmbaths after the hot springs present in this area.

The manufacturing sector includes the brick, steel and wood carving industries and the production of dried fruit and fruit juices (WDM, 2019).

The LLM is a coal mining and petrochemical cluster and, as such, its growth is driven by coal mining and electricity generation (LLM, 2019). The contribution of other sectors within the LLM is comparatively small. Mining and quarrying accounts for 71.4% of the local economy.

Both the WDM and LLM have Second Economies (LLM, 2019; WDM, 2019). The Second Economy is characterised by high unemployment and a lack of skills, typically amongst the youth, women and people with disabilities. This is largely an informal, unskilled and marginalised economy made up of people who are not considered employable in the First Economy. The Second Economy makes up a significant component of the economy and is especially visible with informal enterprise. The Second Economy contributes a large portion of the livelihoods of the poor and includes the self-employed, microentrepreneurs from street trading and other informal activities. Both the WDM and LLP have economies that are capable of absorbing the population of the Second Economy.

10.14.7 Labour Force and Employment

Table 10-31 provides an overview of the population of each area, grouped into age ranges. This provides an indication of the expected portion of the population that are of working age (i.e. between 18 and 64 years of age). Figure 10-40 below presents an overview of the employment status of the population. In this figure, 'not applicable' refers to those who are not considered to be of working age (i.e. individuals younger than 18 and older than 65 years of age). Discouraged work-seekers refers to individuals who are unemployed but who are not actively seeking work.

Table 10-31: Population by Age Range

Age Range	Limpopo		WDM		LLM		Ward 3	
	No.	%	No.	%	No.	%	No.	%
Under 18	2 216 457	41.01	242472	35.69	37 531	31.57	2 328	21.49
18 to 64	2 849 994	52.73	397 331	58.49	76 544	64.40	8 090	74.67
65 and over	338 417	6.26	39 534	5.82	4 789	4.03	417	3.85

Adapted from Wazimap (Wazimap, 2017)

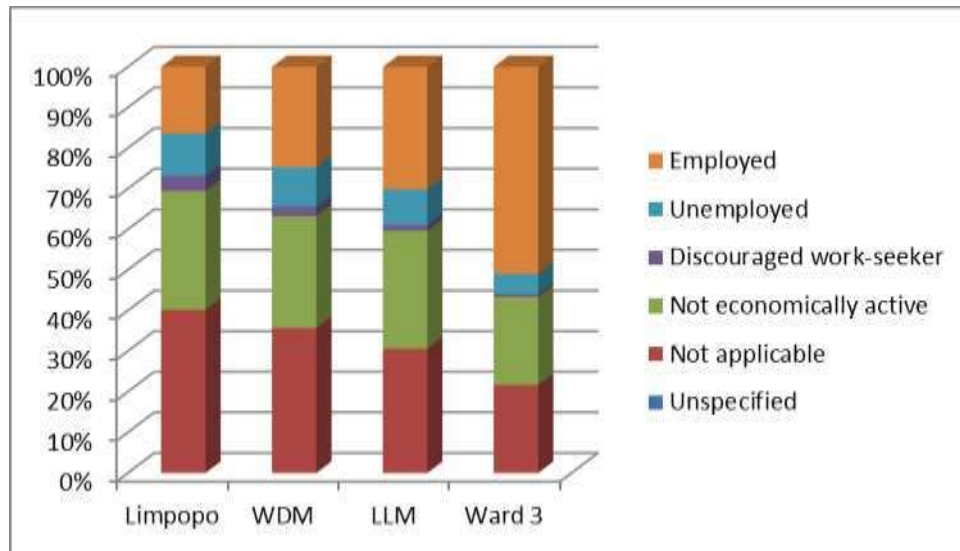


Figure 10-40: Employment Statistics within the Broader Study Area

Adapted from Wazimap (Wazimap, 2017)

Figure 10-41 provides an overview of the employment per sector within the broader study area. In this figure, “Not applicable” refers to individuals who are not employed (i.e. unemployed, not economically active, not of working age and discouraged work seekers).

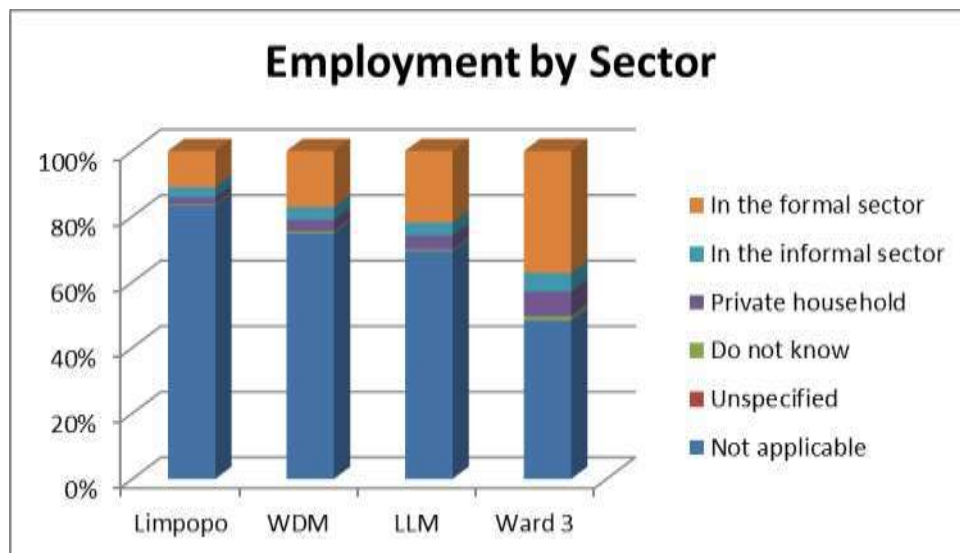


Figure 10-41: Employment by Sector within the Broader Study Area

10.14.8 Income Levels

Figure 10-42 summarises the annual income for employed individuals. These figures are as per the 2011 census and have not been updated to consider inflation. A family of four with a monthly household income of R 1 600.00 or less would be considered to live in poverty, as this income would leave the family unable to meet their food needs with no money left for

non-food items. This would equate to an annual income of R 19 200.00 or less. If all the individuals earning an income represent a single breadwinner for a family of four, between 32.8% (in Ward 13) and 45.3% (in Limpopo Province) of the population would be at risk of living in poverty, including those who report they earn no income.

10.14.9 Housing

Figure 10-43 presents an overview of the type of dwellings within which the household reside. Table 10-32 below presents a snapshot of the most and least common types of dwellings in the areas of interest. In this figure and table, a cluster house refers to one in a complex and a townhouse refers to a semi-detached house within a complex. A flat or apartment is considered as a flat or apartment within a block of flats. A house, flat or room in the backyard refers to a room, flatlet, granny flat or servants' quarters on the same property as a larger dwelling or attached to a larger dwelling. A dwelling on a separate stand refers to a house or a brick or concrete structure on a separate property (yard or stand) or on a farm. Informal dwellings are sub-divided into two types: those in a backyard and those which are not. The latter may refer to shacks in an informal or squatter settlement or on a farm. Traditional dwellings refer to any dwelling, hut or structure made of traditional materials.

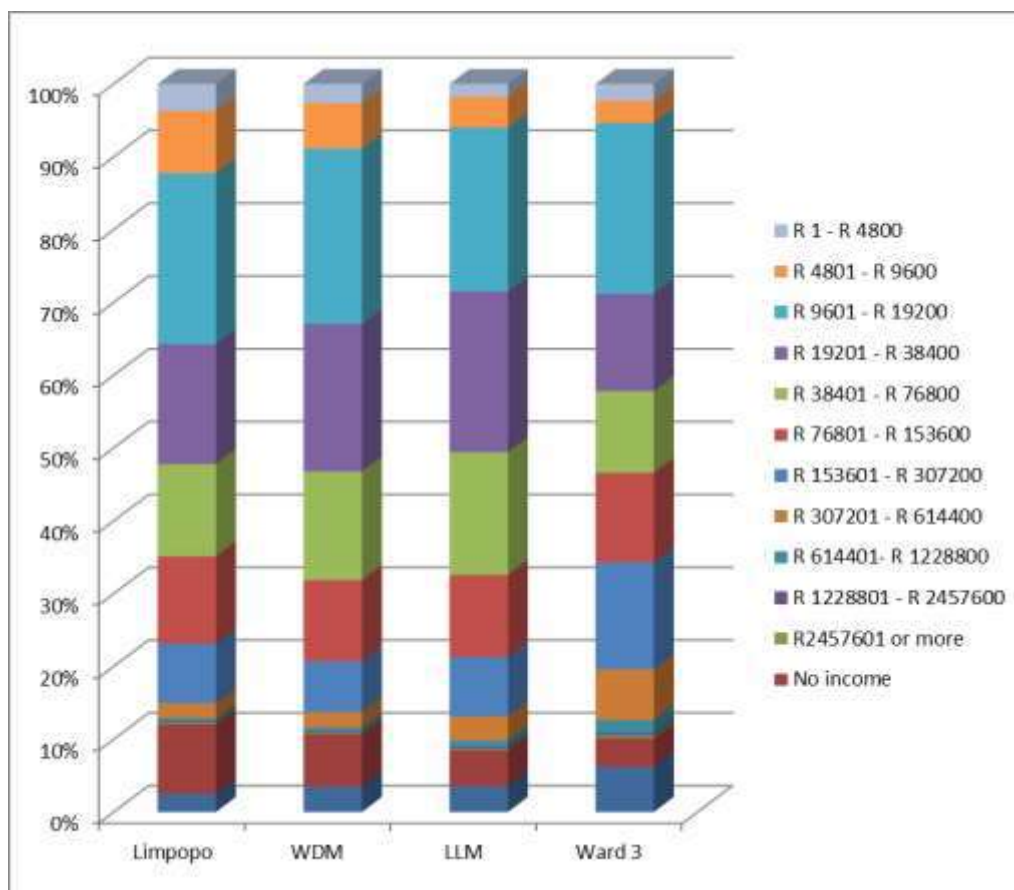


Figure 10-42: Annual Income for Employed Individuals within the Broader Project Area

Adapted from Wazimap (Wazimap, 2017)

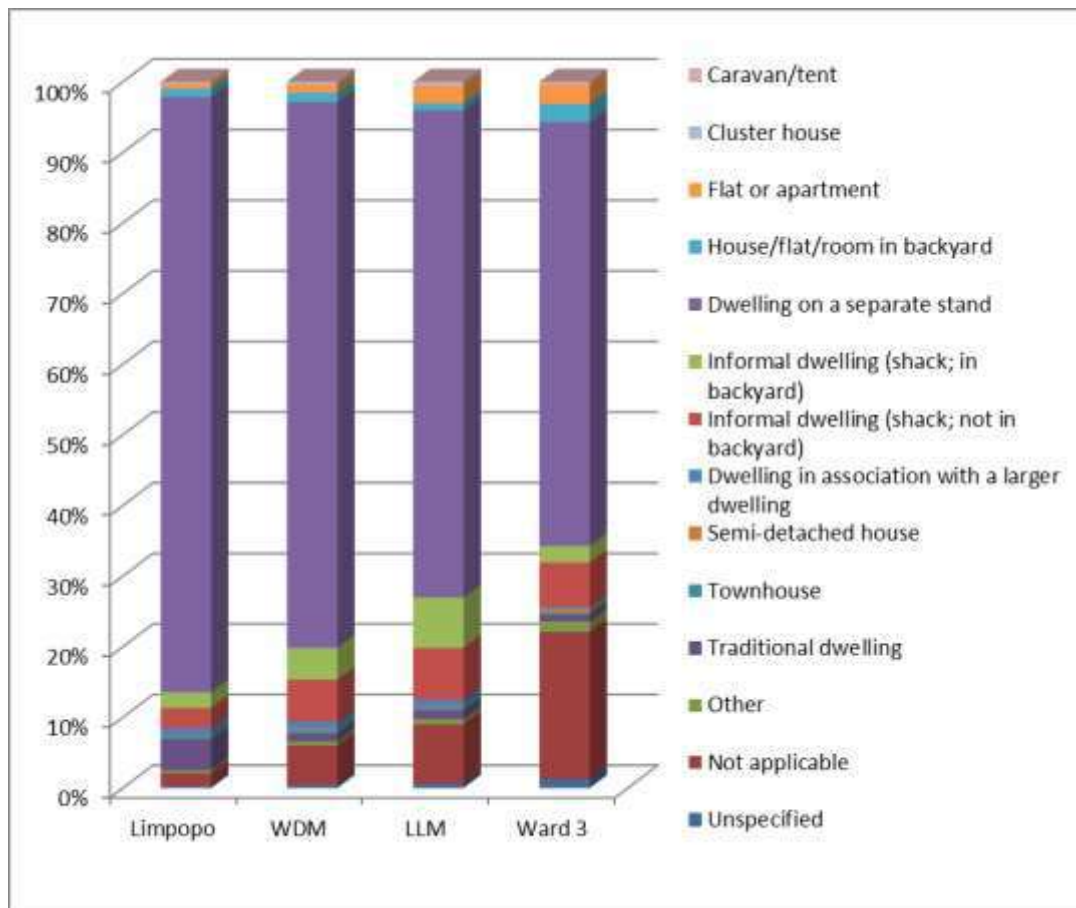


Figure 10-43: Households by Dwelling Type within the Broader Project Area

Adapted from Wazimap (Wazimap, 2017)

Table 10-32: Most and Least Common Dwelling Types within the Project Areas

Dwelling type	Limpopo	WDM	LLM	Ward 3
Most common	Separate stand	Separate stand	Separate stand	Separate stand
Second-most common	Traditional Dwelling	Informal, other	Informal, other	Informal, other
Third-most common	Informal, other	Informal, in backyard	Informal, in backyard	Flat or apartment
Least common	Caravan / Tent	Caravan / Tent	Semi-detached	Cluster house

Adapted from Wazimap (Wazimap, 2017)

Figure 10-44 presents the types of ownership within the larger study area. Table 10-33 below provides a snapshot of the most and least common types of home ownership within the broader study area.

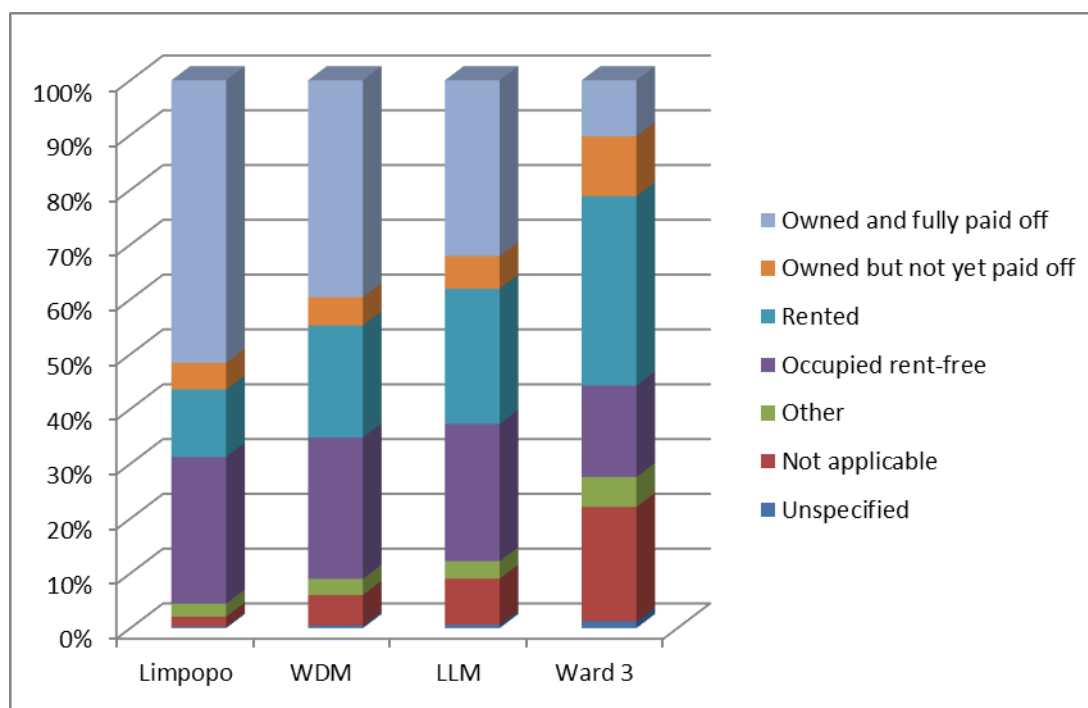


Figure 10-44: Dwelling Ownership within the Study Areas

Adapted from Wazimap (Wazimap, 2017)

Table 10-33: Most and Least Common Dwelling Ownership Types within the Project Areas

Dwelling type	Limpopo	WDM	LLM	Ward 3
Most common	Owned and fully paid off.			Rented
Least common	Owned but not yet fully paid off.			Owned and fully paid off.

Within the WDM, 30 informal settlements have been established with an estimated 5 800 households (WDM, 2019). The informal settlements at Marapong and Steenbokpan are included in these figures, with an estimated 2 000 and 600 households respectively. WDM reports there is a housing backlog of 68 828 houses within the district, of which 20 575 (29.89%) houses are required in the LLM.

10.14.10 Household Services

10.14.10.1 Electricity

Figure 10-45 presents an overview of the sources of energy for domestic activities (i.e. cooking, heating and lighting) in the LLM. The percentages in the graph show the proportions of households that have access to energy sources for the various activities – several households did not report access to resources, or these were not captured in the

WDM or LLM IDPs. The IDPs also reports that 3 429 households are provided with free electricity in LLM (LLM, 2019; WDM, 2019).

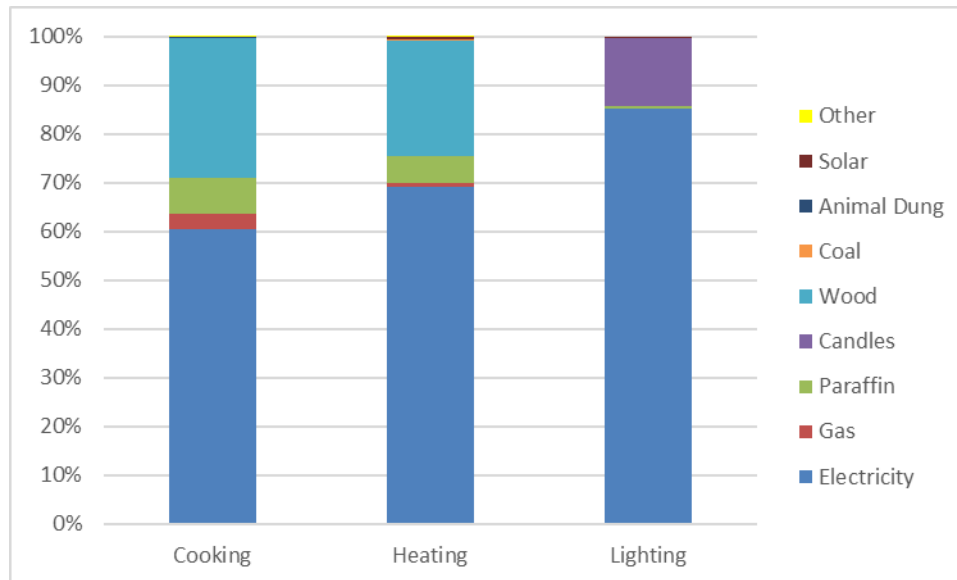


Figure 10-45: Sources of Energy for Domestic Activities

Adapted from the WDM and LLM IDPs (WDM, 2019; LLM, 2019)

The WDM IDP reports an electricity backlog for 32 006 households in the district, of which 1 898 (5.93%) households are in the LLM (WDM, 2019). Eskom plans to connect an additional 363 households in LLM and 3 204 households within the WDM during the 2019/2020 financial year. Both the LLM and WDP IDP report that 4 418 households have no electrical connections (LLM, 2019; WDM, 2019).

10.14.10.2 Water Supply

The Blue Drop report shows that water quality within the WDM and the LLM, ranges from bad to excellent, depending on the source of the water. However, it appears there is much data missing for the Blue and Green Drop reports (WDM, 2019).

Figure 10-46 presents the various sources of domestic water for households within the study areas. In this figure, the regional/local water scheme refers to a scheme that is operated by the municipality or other water services provider. Stagnant water includes dams and pools of water.

The Moloko Dam supplies all urban areas within the LLM, and the rural areas are currently supplied by four different water services schemes (LLM, 2019). The LLM does have a Water Services Development Plan but the most recent of these documents was submitted to the Municipal Council for adoption in 2014. In Ward 3, approximately 75% of households have access to water inside their dwellings. Those that do not have access to water inside their homes make use of a tap on the property (20%) or community standpipes (5%).

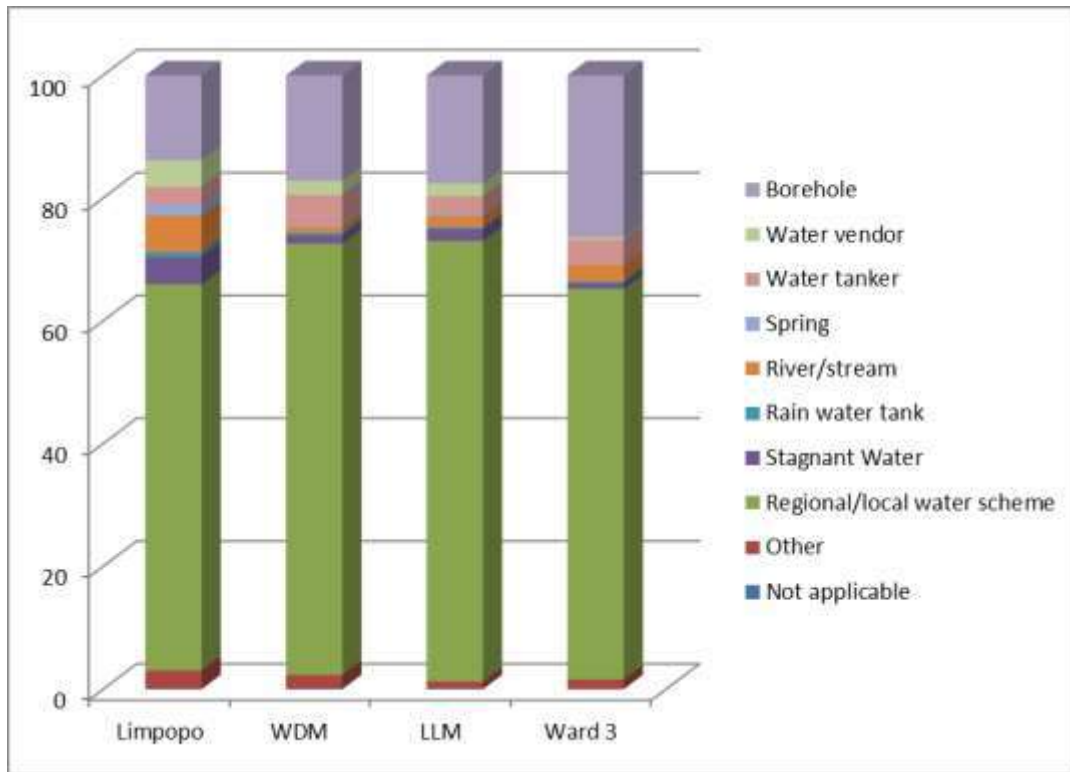


Figure 10-46: Sources of Water for Households in the Broader Study Area

Adapted from Wazimap (Wazimap, 2017)

Table 10-34 below presents statistics relating to access to water in 2011 and 2016 in the LLM and WDM. The trends in the numbers presented suggest that the water supply is not keeping up with demand in either of these regions.

Table 10-34: Changes in Access to Water between 2011 and 2016

Municipality	LLM			WDM		
	2011	2016	Change	2011	2016	Change
Number of Households	29 879	42 073	+ 41%	179 867	211 472	+ 18%
Access to Piped Water	29 080	30 778	+ 6%	169 559	150 653	- 11%
No Access to Piped Water	799	11 295	+1 314%	10 308	60 819	+ 490%

Adapted from the WDM IDP (WDM, 2019)

Fewer households in the WDM had access to piped water in 2016 as compared to 2011 (WDM, 2019). This trend is also seen in the Modimolle-Mookgophong, Bela-Bela and Mogalakwena Local Municipalities but there is no explanation in the IDP to suggest why this is happening. Challenges within the WDM in terms of water provision include aging infrastructure, inadequate bulk water supply, poor quality of the drinking water and illegal connections, vandalism and theft.

10.14.10.3 Sanitation and Toilet Facilities

Figure 10-47 illustrates the access to toilet facilities within the broader study area. This includes pit toilets with and without ventilation and flush toilets connected to septic tanks or the sewerage system. The WDM IDP reports a net increase in access to sanitation facilities in both the LLM and WDM (WDM, 2019).

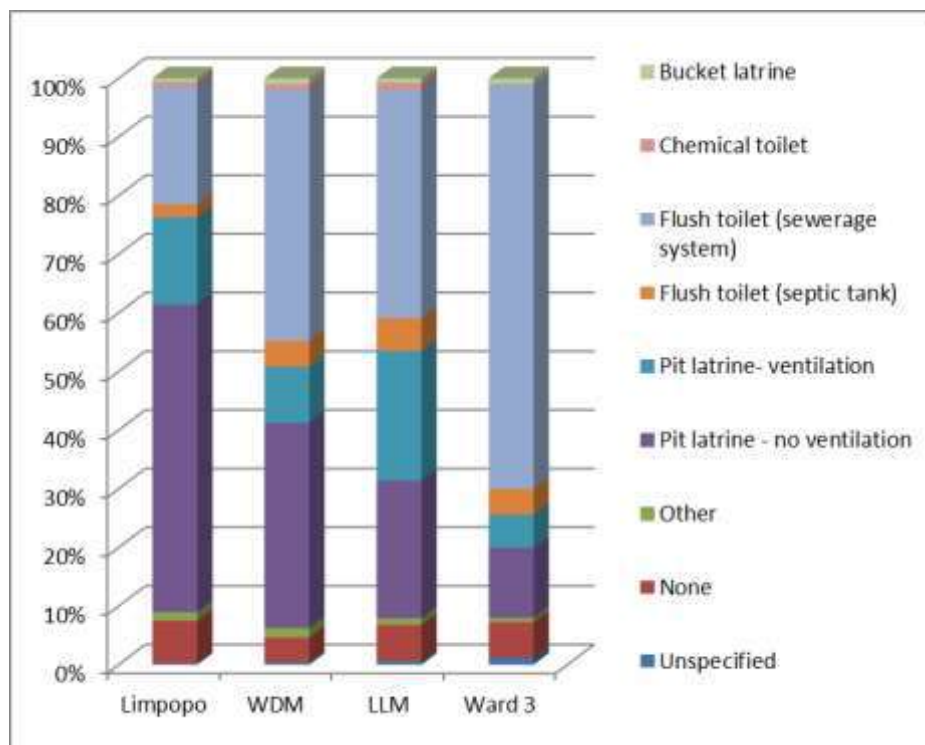


Figure 10-47: Household Access to Toilet Facilities within the Study Areas

10.14.10.4 Waste Management

Figure 10-48 summarises the waste removal services used within the broader study area. Within the WDM, waste collection includes domestic, commercial, industrial and institutional waste (WDM, 2019). Most of the waste within the WDM is removed from households, followed by commercial sources. There is a backlog in service delivery as some households, especially in the Modimolle-Mookgophong, Bela-Bela and Mogalakwena Local Municipalities, are below the basic level of service.

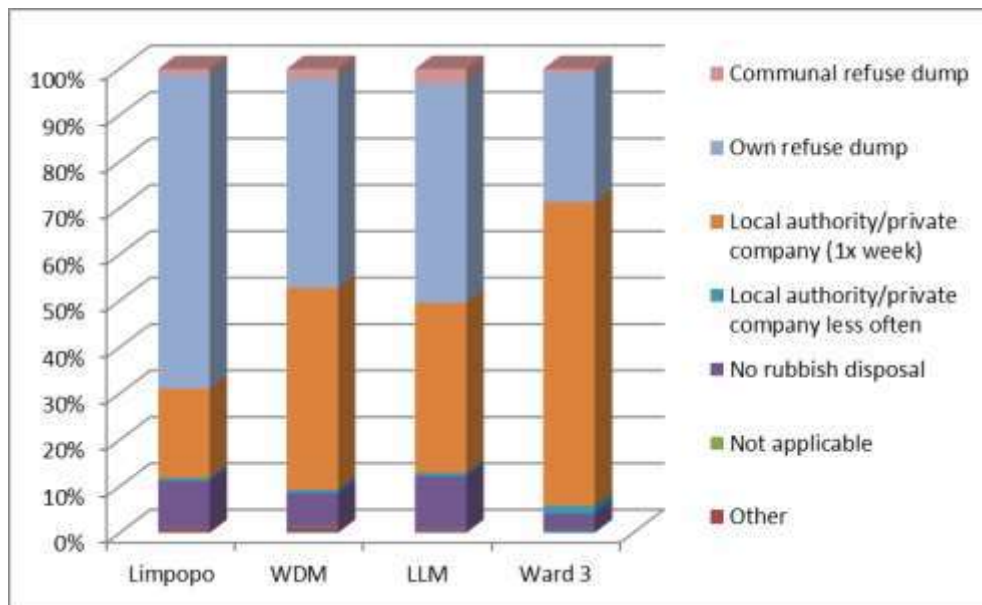


Figure 10-48: Refuse Removal Services within the Broader Study Area

Adapted from Wazimap (Wazimap, 2017)

Within the LLM, communities generally need to make use of backyard dumping sites and communal sites (WDM, 2019). The municipality has no drop-off facilities, garden sites, transfer stations, material recovery facilities or buy-back centres for recycling (LLM, 2019). The supply of refuse receptacles for refuse storage within the LLM is inadequate and there is one permitted waste disposal facility (landfill). The life expectancy of this facility is five years.

The municipality is fully reliant on private companies to recover and process recyclable materials (LLM, 2019). Informal recyclers also recover material at the landfill sites. Illegal dumping of garden refuse is a problem, especially in the Onverwacht and Marapong areas as facilities are not available. Several areas within the LLM, including Steenbokpan, are part of a pilot programme that removes refuse from the rural parts of the municipality. The LLM has provided skips at select central locations and these are collected on a weekly basis. The municipality has implemented a formal waste education programme and supports other waste education initiatives active in the area.

10.14.11 Health Care

Table 10-35 presents an overview of the healthcare facilities within the LLM and WDM. Despite the numbers presented in the table, healthcare provision is not adequate within the WDM as numerous settlements occur more than 5 km from a healthcare facility (WDM, 2019). Some rural villages are more than 20 km away from the nearest hospital and more than 5 km from a clinic.

Table 10-35: Number of Healthcare Facilities in the LLM and WDM

Healthcare Facility	LLM	WDM Total
Hospital	2 (and 1 private hospital)	11
Clinic	7	57
Mobile Clinic	7	32
Emergency Medical Services (EMS) Stations	2	12

Adapted from the WDM IDP (WDM, 2019)

10.14.12 Public Transport and Transport Infrastructure

The WDM includes 21 938 km of roads (WDM, 2019). Of this, only 16% (3 555 km) has been surfaced. Local access roads are gravel roads and are used by busses and taxis. These roads require upgrading.

Table 10-36 presents the taxi and bus public transport facilities within the LLM and WDM. Other transportation options include LDVs metered taxi operations, transportation of learners and non-Monitored Transport (NMT).

The existing public transportation system is not user-friendly for disabled persons (WDM, 2019). There is no commuter rail transport service in the WDM. The entire railway network in the Limpopo province is owned by Transnet Freight Rail and services long-distance passengers only.

Table 10-36: Transport Alternatives in the LLM and WDM

Healthcare Facility	LLM	WDM Total
Taxis (number of routes)	12	140
Bus operations: Formal bus terminals	2	3
Bus operations: Informal bus terminals	1	6
Bus operations: Total bus terminals	3	9

11 Item 2(j): Impacts identified

Refer to Table 12-5 for the preliminarily identified impacts per Project activity and the proposed mitigation measures.

11.1 Item 2(g)(vi): Methodology used in determining the significance of the environmental impacts

The methodology to identify, determine and assess the potential impacts is provided in this section and will be utilised by the relevant Specialists during the EIA Phase.

11.1.1 Impact rating

The impact assessment methodology that will be utilised during the EIA Phase for the Project consists of two phases namely impact identification and impact significance rating.

Impacts and risks have been identified based on a description of the activities to be undertaken. Once impacts have been identified, a numerical environmental significance rating process will be undertaken that utilises the probability of an event occurring and the severity of the impact as factors to determine the significance of a particular environmental impact.

The severity of an impact is determined by taking the spatial extent, the duration and the severity of the impacts into consideration. The probability of an impact is then determined by the frequency at which the activity takes place or is likely to take place and by how often the type of impact in question has taken place in similar circumstances.

Following the identification and significance ratings of potential impacts, mitigation and management measures were incorporated into the EMP.

Details of the impact assessment methodology used to determine the significance of physical, bio-physical and socio-economic impacts are provided below.

The significance rating process follows the established impact/risk assessment formula:

$$\text{Significance} = \text{Consequence} \times \text{Probability} \times \text{Nature}$$

Where

$$\text{Consequence} = \text{Intensity} + \text{Extent} + \text{Duration}$$

And

$$\text{Probability} = \text{Likelihood of an impact occurring}$$

And

$$\text{Nature} = \text{Positive (+1) or negative (-1) impact}$$

Note: In the formula for calculating consequence, the type of impact is multiplied by +1 for positive impacts and -1 for negative impacts

The matrix calculates the rating out of 147, whereby intensity, extent, duration and probability are each rated out of seven as indicated in Table 11-2. The weight assigned to the various parameters is then multiplied by +1 for positive and -1 for negative impacts.



Impacts are rated prior to mitigation and again after consideration of the mitigation has been applied; post-mitigation is referred to as the residual impact. The significance of an impact is determined and categorised into one of seven categories (The descriptions of the significance ratings are presented in Table 11-3).

It is important to note that the pre-mitigation rating takes into consideration the activity as proposed, (i.e., there may already be some mitigation included in the engineering design). If the specialist determines the potential impact is still too high, additional mitigation measures are proposed.

Table 11-1: Impact Assessment Parameter Ratings

Rating	Intensity/Replaceability		Extent	Duration/Reversibility	Probability
	Negative Impacts (Nature = -1)	Positive Impacts (Nature = +1)			
7	Irreplaceable loss or damage to biological or physical resources or highly sensitive environments. Irreplaceable damage to highly sensitive cultural/social resources.	Noticeable, on-going natural and / or social benefits which have improved the overall conditions of the baseline.	<u>International</u> The effect will occur across international borders.	Permanent: The impact is irreversible, even with management, and will remain after the life of the project.	Definite: There are sound scientific reasons to expect that the impact will definitely occur. >80% probability.
6	Irreplaceable loss or damage to biological or physical resources or moderate to highly sensitive environments. Irreplaceable damage to cultural/social resources of moderate to highly sensitivity.	Great improvement to the overall conditions of a large percentage of the baseline.	<u>National</u> Will affect the entire country.	Beyond project life: The impact will remain for some time after the life of the project and is potentially irreversible even with management.	Almost certain / Highly probable: It is most likely that the impact will occur. <80% probability.

Rating	Intensity/Replaceability		Extent	Duration/Reversibility	Probability
	Negative Impacts (Nature = -1)	Positive Impacts (Nature = +1)			
5	Serious loss and/or damage to physical or biological resources or highly sensitive environments, limiting ecosystem function. Very serious widespread social impacts. Irreparable damage to highly valued items.	On-going and widespread benefits to local communities and natural features of the landscape.	<u>Province/ Region</u> Will affect the entire province or region.	Project Life (>15 years): The impact will cease after the operational life span of the project and can be reversed with sufficient management.	Likely: The impact may occur. <65% probability.
4	Serious loss and/or damage to physical or biological resources or moderately sensitive environments, limiting ecosystem function. On-going serious social issues. Significant damage to structures / items of cultural significance.	Average to intense natural and / or social benefits to some elements of the baseline.	<u>Municipal Area</u> Will affect the whole municipal area.	Long term: 6-15 years and impact can be reversed with management.	Probable: Has occurred here or elsewhere and could therefore occur. <50% probability.

Rating	Intensity/Replaceability		Extent	Duration/Reversibility	Probability
	Negative Impacts (Nature = -1)	Positive Impacts (Nature = +1)			
3	Moderate loss and/or damage to biological or physical resources of low to moderately sensitive environments and, limiting ecosystem function. On-going social issues. Damage to items of cultural significance.	Average, on-going positive benefits, not widespread but felt by some elements of the baseline.	<u>Local</u> Local extending only as far as the development site area.	Medium term: 1-5 years and impact can be reversed with minimal management.	Unlikely: Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur. <25% probability.
2	Minor loss and/or effects to biological or physical resources or low sensitive environments, not affecting ecosystem functioning. Minor medium-term social impacts on local population. Mostly repairable. Cultural functions and processes not affected.	Low positive impacts experience by a small percentage of the baseline.	<u>Limited</u> Limited to the site and its immediate surroundings.	Short term: Less than 1 year and is reversible.	Rare / improbable: Conceivable, but only in extreme circumstances. The possibility of the impact materialising is very low as a result of design, historic experience or implementation of adequate mitigation measures. <10% probability.

Rating	Intensity/Replaceability		Extent	Duration/Reversibility	Probability
	Negative Impacts (Nature = -1)	Positive Impacts (Nature = +1)			
1	<p>Minimal to no loss and/or effect to biological or physical resources, not affecting ecosystem functioning. Minimal social impacts, low-level repairable damage to commonplace structures.</p>	<p>Some low-level natural and / or social benefits felt by a very small percentage of the baseline.</p>	<p>Very limited/Isolated Limited to specific isolated parts of the site.</p>	<p>Immediate: Less than 1 month and is completely reversible without management.</p>	<p>Highly unlikely / None: Expected never to happen. <1% probability.</p>

Table 11-2: Probability / Consequence Matrix

Significance																																					
-147	-140	-133	-126	-119	-112	-105	-98	-91	-84	-77	-70	-63	-56	-49	-42	-35	-28	-21	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	147
-126	-120	-114	-108	-102	-96	-90	-84	-78	-72	-66	-60	-54	-48	-42	-36	-30	-24	-18	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126
-105	-100	-95	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105
-84	-80	-76	-72	-68	-64	-60	-56	-52	-48	-44	-40	-36	-32	-28	-24	-20	-16	-12	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84
-63	-60	-57	-54	-51	-48	-45	-42	-39	-36	-33	-30	-27	-24	-21	-18	-15	-12	-9	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63
-42	-40	-38	-36	-34	-32	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8	-6	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42
-21	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
-21	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Consequence																																					


Table 11-3: Significance Rating Description

Score	Description	Rating
109 to 147	A very beneficial impact that may be sufficient by itself to justify implementation of the project. The impact may result in permanent positive change	Major (positive) (+)
73 to 108	A beneficial impact which may help to justify the implementation of the project. These impacts would be considered by society as constituting a major and usually a long-term positive change to the (natural and / or social) environment	Moderate (positive) (+)
36 to 72	A positive impact. These impacts will usually result in positive medium to long-term effect on the natural and / or social environment	Minor (positive) (+)
3 to 35	A small positive impact. The impact will result in medium to short term effects on the natural and / or social environment	Negligible (positive) (+)
-3 to -35	An acceptable negative impact for which mitigation is desirable. The impact by itself is insufficient even in combination with other low impacts to prevent the development being approved. These impacts will result in negative medium to short term effects on the natural and / or social environment	Negligible (negative) (-)
-36 to -72	A minor negative impact requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which in conjunction with other impacts may prevent its implementation. These impacts will usually result in negative medium to long-term effect on the natural and / or social environment	Minor (negative) (-)
-73 to -108	A moderate negative impact may prevent the implementation of the project. These impacts would be considered as constituting a major and usually a long-term change to the (natural and / or social) environment and result in severe changes.	Moderate (negative) (-)
-109 to -147	A major negative impact may be sufficient by itself to prevent implementation of the project. The impact may result in permanent change. Very often these impacts are immitigable and usually result in very severe effects. The impacts are likely to be irreversible and/or irreplaceable.	Major (negative) (-)

11.2 Item 2(g)(vii): The positive and negative impacts that the proposed activity and alternatives will have on the environment and the community that may be affected

All potential negative and positive impacts will be identified, ranked and mitigation measures prescribed during the EIA phase.

11.3 Item 2(g)(viii): The possible mitigation measures that could be applied and the level of risk

Possible mitigation measures that could be applied to risks regarding the site layout will be considered and discussed as part of the EIA Phase. The infrastructure layout plan will be designed to limit, prevent and avoid potential environmental and social impacts. The layout plan will also take into consideration the comments received from I&APs during the PPP as well as the findings of the specialist investigations as part of the EIA Phase. The proposed mitigation measures for the assumed risks (to be confirmed during the EIA Phase) are also listed in Table 12-5 below.

11.4 Item 2(g)(ix): The outcome of the site selection matrix

The final layout plan will be confirmed during the EIA Phase and included in the EIA Report. However, the site selection is based on the position of the coal resource and therefore only infrastructure layout will be finalised during the EIA Phase.

11.5 Item 2(g)(x): Motivation where no alternative sites were considered

The alternatives considered in this report and during the pre-feasibility studies undertaken include the design and layout of the mine, mining method, water supply, electricity supply, transportation of coal, and the “No-Go” alternative. Refer to section 9.1 above.

11.6 Item 2(g)(xi): Statement motivating the preferred alternatives and site

The location of the Project is determined by the location of the coal resource. Therefore, alternatives in terms of infrastructure placement were considered in the pre-application phase and informed by the sensitivity map compiled prior to the Project Description being finalised.

The mining activities will avoid sensitive environments.

12 Item 2(k): Plan of Study for the EIA process

The purpose of the EIA phase is to investigate the potential negative and positive impacts of a proposed project activity on the environment. The potential impacts will then be quantified to assess the significance that an impact may pose on the receiving environment. The objectives of the EIA process are to:

- Ensure that the potential biophysical and socio-economic impacts of the proposed Project, including those as a result of blasting and potential traffic impacts, are taken into consideration during the decision-making process;

- Ensure that the Project activities undertaken do not have a substantial detrimental impact on the environment by presenting management and mitigation measures that will avoid and/or reduce those impacts;
- Ensure that I&APs are informed about the proposed Project and the PPP to be followed;
- Ensure that I&APs are given an opportunity to raise concerns; and
- Provide a process aimed at enabling authorities to make an informed decision, especially in respect of their obligation to take environmental and social considerations into account when making those decisions.

12.1 Item 2(k)(i): Description of the alternatives considered and assessed

The alternatives including the “No-Go” alternatives considered and assessed are presented in Section 9.1 above. These will be further investigated during the EIA phase.

12.2 Item 2(k)(ii): Description of aspects to be assessed as part of the EIA process

The EIA Phase will assess the overall aspects affected by the proposed Project in relation to Listed Project activities. The identified Listed and specified Activities for the Project are included in section 5.1 above, and the affected environmental aspects, which will also form part of the EIA Phase are contained in section 12.3 below.

12.3 Item 2(k)(iii): Aspects to be assessed by specialists

The following Specialist Impact Assessments will be undertaken as part of the EIA Phase:

- Groundwater Impact Assessment;
- Surface Water Impact Assessment;
- Fauna and Flora Impact Assessment;
- Wetlands Impact Assessment;
- Aquatic Ecology Impact Assessment;
- Soil, Land Use and Land Capability;
- Air Quality Impact Assessment;
- Noise Impact Assessment;
- Blasting Impact Assessment;
- Geochemical Assessment;
- Social Impact Assessment;
- Heritage Impact Assessment;

- Pedology study;
- Traffic Impact Assessment;
- Closure and Rehabilitation; and
- Public Participation Process.

12.4 Item 2(k)(iv): Description of the proposed method of assessing the environmental aspects

The full Impact Assessment methodology is included in Section 11.1.1 above and the methodology to be used by the relevant Specialists is described below:

12.4.1 Surface Water

A detailed surface water assessment will be conducted to assess and identify potential impacts that may arise from the proposed development at the Dalyshope Coal Mining Project site. This section provides the scope of work and methodology that will be undertaken during the EIA phase of this project.

12.4.1.1 Site Assessment

A site visit was undertaken to assess and verify the onsite hydrological characteristics to enable identification of potential surface water impacts. During the site visit, collection of surface water samples for laboratory analysis was undertaken to establish baseline water quality conditions prior to the commencement of the proposed Project.

12.4.1.2 Water Quality Update

The main risk associated with coal mining is the potential water quality contamination. Water quality data for the Project site analysed in 2013 by Digby Wells will be used in conjunction with samples collected during the site visit undertaken.

12.4.1.3 Stormwater Management Plan Update

A Storm Water Management Plan (SWMP) will be developed to ensure the separation of clean and dirty water within the mining environment, and to develop an effective and efficient water management plan. The following tasks will need to be completed:

- Delineation of clean and dirty water catchments;
- Calculation of peak flows for clean and dirty water catchments; and
- Conceptual placement of stormwater infrastructure will be indicated on a plan and recommend conceptual sizes of the stormwater infrastructure will be provided.

12.4.1.4 Water and Salt Balance Update

A review of the proposed water management plan will be undertaken to understand the entire water reticulation system, explaining its drivers and controls. This will include assessing:

- Process flows and volumes, with the geochemical and groundwater specialist studies providing input into components of the water and salt balance;
- Rainfall and runoff volumes for affected catchments and open water storage facilities;
- Capacities of water storage facilities; and
- Development of an excel based average annual, monthly and daily water balances indicating inflows, outflows, potential losses and transfers within the system.

12.4.2 Groundwater

Digby Wells Environmental undertook a hydrogeological Impact Assessment for the Dalyshope (Phase 1) Coal Mine on the Klaarwater 231 LQ and Dalyshope 232 LQ farms during 2013. The baseline information established during the field investigations for the Dalyshope (Phase 1) Coal Mine will inform the baseline for Dalyshope Mining Right application and environmental authorisation for the same properties.

The baseline will be updated with the following hydrogeological assessments:

- Hydrocensus survey to verify changes in water quality, levels and groundwater use since the 2013 assessment. The field survey for the hydrocensus was undertaken during the scoping phase of the project, however the water quality results will only be available for the impact assessment report;
- Update the baseline, conceptual and numerical models with the following updates to assess the expected impacts for the project:
 - Updated field assessment findings for the hydrocensus and geochemical assessments;
 - Updated infrastructure plans; and
- Hydrogeological impact assessment report and management plan will be compiled to assess the site-specific impacts and mitigation measures required to manage and protect the groundwater resource.

12.4.3 Soils, Land Capability and Use

This section describes the methodology after the completion of the Impact Assessment report, indicated in Figure 12-1.

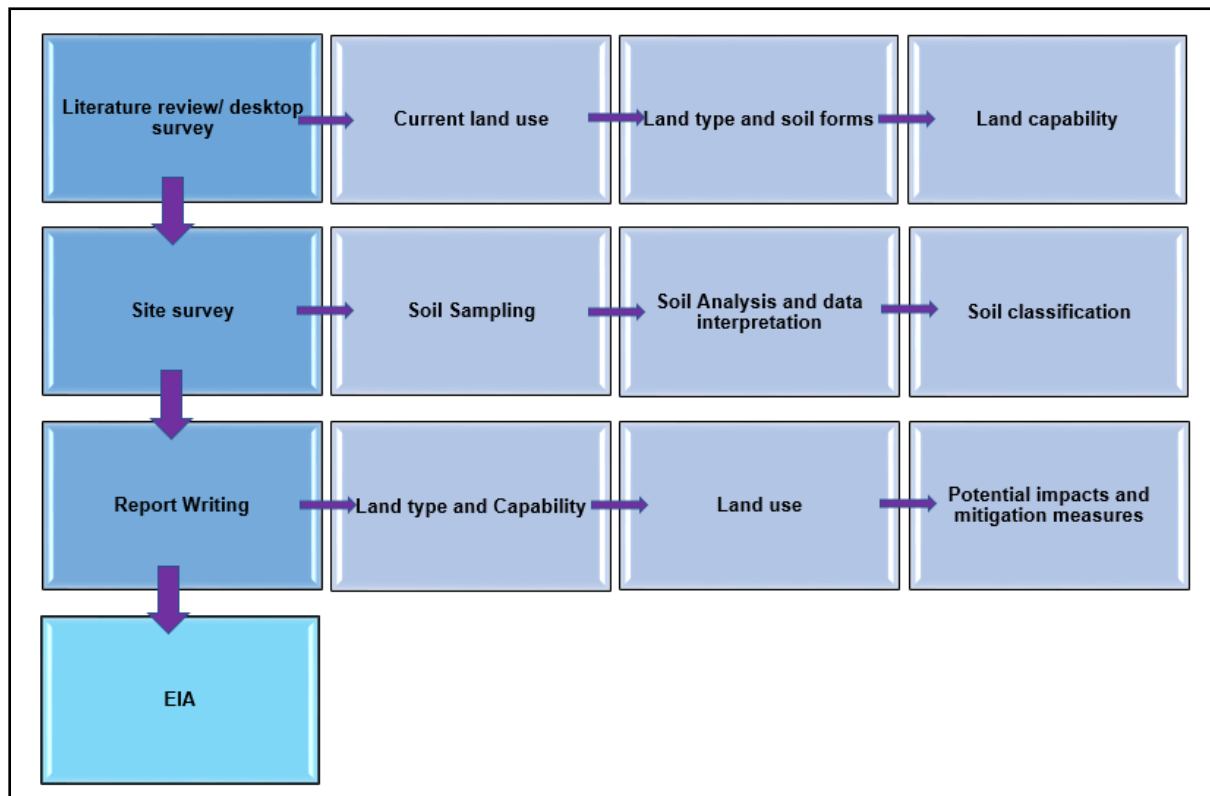


Figure 12-1: Soils, Land Capability and Use Assessment and Report Process

12.4.3.1 Soil Physical and Chemical Analysis

In accordance with the methodology given in the Handbook of Standard Soil Testing Methods for Advisory Purposes (Soil Science Society of South Africa, 1990), the soil samples will be tested for the following parameters:

- Soil pH (KCl);
- Exchangeable cations (Ca, Mg, K and Na) (Ammonium acetate extraction);
- Phosphorus (Bray No.1 extractant);
- Organic Carbon; and
- Soil Texture (Clay, Sand and Silt).

12.4.3.2 Land Capability

Land capability and suitability (agricultural potential) mapping, which highlight the capability (what could be practised) of the various soils identified at a site, and the suitability (what should be practised considering various restrictions), respectively, were undertaken for the Project area at desktop level and was ground verified during the site visit.



Land capability mapping is based on identifying soil forms during the site visit. The land capability mapping involves dividing land into one of eight potential classes (Table 12-1) of soil capability, whereby Classes I-IV represent arable land and Classes V-VIII represent non-arable land according to the guidelines (Schoeman *et al.*, 2002).

Table 12-1: Land Capability Classes

Land Capability Class	Increased Intensity of Use									Land Capability Groups
	W	F	LG	MG	IG	LC	MC	IC	VIC	
I	W	F	LG	MG	IG	LC	MC	IC	VIC	Arable Land
II	W	F	LG	MG	IG	LC	MC	IC		
III	W	F	LG	MG	IG	LC	MC			
IV	W	F	LG	MG	IG	LC				
V	W		LG	MG						Grazing Land
VI	W	F	LG	MG						
VII	W	F	LG							
VIII	W									Wildlife

W - Wildlife

MG - Moderate
Grazing

MC - Moderate
Cultivation

F- Forestry

IG - Intensive Grazing

IC - Intensive Cultivation

LG - Light
Grazing

LC - Light Cultivation

VIC - Very Intensive Cultivation

12.4.3.3 Land Use

The current land use was identified by aerial imagery during the Scoping Phase and by the on-site inspection. The maps will indicate delineated areas of similar land use (Land Type Survey Staff, 1972 – 2006). The land uses are divided into plantations, natural, waterbodies, mines, urban built-up; and cultivated categories.

12.4.3.4 Land Suitability

Soil agricultural potential or suitability mapping will be determined by considering the soil forms, land capability classes, soil chemistry results, the hydrology of the site and the current land use. The process involves allocating terrain factors (such as slope) and soil factors (such as depth, texture, internal drainage and mechanical limitations) (which affect soil-water processes) which define soil forms, to an area of land. The soil chemistry, which includes pH, cation and anion concentrations as well as nitrogen compositions, which are affected by the site hydrology, will be considered in determining the final suitability of the soil. The suitability guidelines according to Schoeman *et al.*, (2002) will be used to determine the Land capability.

The soil impacts will be assessed based on the impact's magnitude as well as the receiving environment's sensitivity, resulting in an impact significance rating which identifies the most important impacts that require management.

12.4.4 Wetlands

Wetlands are delineated based on scientifically sound methods, and utilizes a tool from the Department of Water and Sanitation 'A practical field procedure for identification and delineation of wetlands and riparian areas' (DWAF, 2005) as well as the "Updated manual for identification and delineation of wetlands and riparian areas" (DWAF, 2008). The delineation of the watercourses presented in this report is based on both desktop delineation and site verification.

12.4.4.1 Desktop Delineation

A desktop assessment was conducted with wetland and riparian units potentially affected by the proposed activities identified using a range of tools, including:

- 1: 50 000 topographical maps;
- SA Water Resources, such as National Freshwater Ecosystem Priority Areas (NFEPA); and
- Recent, relevant aerial and satellite imagery, including Google Earth.

All areas suspected of being wetland and riparian habitat based on the visual signatures on the digital base maps were mapped using google earth.

12.4.4.2 Site Verification

Wetlands were identified based on one or more of the following characteristic attributes (DWAF, 2005):

- The Terrain Unit Indicator helps to identify those parts of the landscape where wetlands are more likely to occur;
- The presence of plants adapted to or tolerant of saturated soils (hydrophytes);

- Wetland (hydromorphic) soils that display characteristics resulting from prolonged saturation; and
- A high-water table that results in saturation at or near the surface, leading to anaerobic conditions developing within 50cm of the soil surface.

12.4.4.3 Wetland Classification and Delineation

The classification system developed for the National Wetlands Inventory is based on the principles of the hydro geomorphic (HGM) approach to wetland classification (SANBI, 2009). The current wetland study follows the same approach by classifying wetlands in terms of a functional unit in line with a level three category recognised in the classification system proposed in SANBI (2009). HGM units take into consideration factors that determine the nature of water movement into, through and out of the wetland system. In general, HGM units encompass three key elements (Kotze *et al.*, 2005):

- Geomorphic setting - This refers to the landform, its position in the landscape and how it evolved (e.g. through the deposition of river borne sediment);
- Water source - There are usually several sources, although their relative contributions will vary amongst wetlands, including precipitation, groundwater flow, stream flow, etc.; and
- Hydrodynamics - This refers to how water moves through the wetland.

The classification of wetland areas found within the study site and/or within 500 m of the study site (adapted from Brinson, 1993; Kotze, 1999, Marneweck and Batchelor, 2002 and DWAF, 2005) are classified as Depressional Pans.

12.4.4.4 Wetland Functionality, Status and Sensitivity

The wetland functionality, status and sensitivity will form part of the main wetland report and is not discussed in the scoping report. The methodology of the aforementioned is summarised here. The wetland functionality, status and sensitivity consist of the following:

- Present Ecological Status (PES) – WET-Health;
- Ecological Importance and Sensitivity (EIS); and
- Provision of Goods and Services - WET-Ecoservices.

Wetland functionality is defined as a measure of the deviation of wetland structure and function from its natural reference condition. The natural reference condition is based on a theoretical undisturbed state extrapolated from an understanding of undisturbed regional vegetation and hydrological conditions. In the current assessment the hydrological, geomorphological and vegetation integrity was assessed for the wetland unit associated with the study site, to provide a PES score (Macfarlane *et al.*, 2007) and an EIS (DWAF, 1999).

The allocations of scores in the functional and integrity assessment are subjective and are thus vulnerable to the interpretation of the specialist. Collection of empirical data is

precluded at this level of investigation due to project constraints including time and budget. Water quality values, species richness and abundance indices, surface and groundwater volumes, amongst others, should ideally be used rather than a subjective scoring system such as is presented here.

The functional assessment methodologies presented below take into consideration subjective recorded impacts to determine the scores attributed to each functional HGM wetland unit. The aspect of wetland functionality and integrity that are predominantly addressed include hydrological and geomorphological function (subjective observations) and the integrity of the biodiversity component (mainly based on the theoretical intactness of natural vegetation) as directed by the assessment methodology. In the current study the wetland was assessed using, WET-Health (Macfarlane *et al.*, 2007), EIS (DWA, 1999) and WetEcoServices, (Kotze *et al.*, 2006).

12.4.4.5 PES – WET-Health

A summary of the three components of the WET-Health Namely Hydrological; Geomorphological and Vegetation Health assessment for the wetlands found on site is described in Table 12-2.

Table 12-2: Health categories used by WET-Health for describing the integrity of wetlands (Macfarlane *et al.*, 2007)

Description	Impact Score Range	PES Score	Summary
Unmodified, natural.	0.0.9	A	Very High
Largely natural with few modifications. A slight change in ecosystem processes is discernible and a small loss of natural habitats and biota may have taken place.	1-1.9	B	High
Moderately modified. A moderate change in ecosystem processes and loss of natural habitats has taken place but the natural habitat remains predominantly intact.	2-3.9	C	Moderate
Largely modified. A large change in ecosystem processes and loss of natural habitat and biota has occurred.	4-5.9	D	Moderate
The change in ecosystem processes and loss of natural habitat and biota is great but some remaining natural habitat features are still recognizable.	6-7.9	E	Low
Modifications have reached a critical level and the ecosystem processes have been modified completely with an almost complete loss of natural habitat and biota.	8.10	F	Very Low

12.4.4.6 Ecological Importance and Sensitivity

Ecological importance is an expression of a wetland's importance to the maintenance of ecological diversity and functioning on local and wider spatial scales. Ecological sensitivity refers to the system's ability to tolerate disturbance and its capacity to recover from disturbance once it has occurred (DWA, 1999). This classification of water resources allows for an appropriate management class to be allocated to the water resource and includes the following:

- Ecological Importance in terms of ecosystems and biodiversity such as species diversity and abundance;
- Ecological functions including groundwater recharge, provision of specialised habitat and dispersal corridors; and
- Basic human needs including subsistence farming and water use.

The EIS of the wetlands is expressed on a scale rating from Very High to Low/Marginal.

12.4.5 Aquatics

Descriptions of the various approaches for the determination of the aquatic ecology baseline are detailed in the respective sections below.

12.4.5.1 Water Quality

Selected *in situ* water quality variables will be measured using water quality meters manufactured by Extech Instruments, namely an ExStik EC500 Combination Meter and an ExStik DO600 Dissolved Oxygen Meter. Temperature, pH, electrical conductivity and dissolved oxygen will be recorded prior to additional biological sampling.

12.4.5.2 Habitat Quality

The availability and diversity of aquatic habitat is important to consider in assessments due to the reliance and adaptations of aquatic biota to specific habitats types (Barbour *et al.*, 1996). Habitat quality and availability assessments are usually conducted alongside biological assessments that utilise fish and macroinvertebrates. Aquatic habitat will be assessed through visual observations on each river system considered.

12.4.5.3 Index for Habitat Integrity

The Index for Habitat integrity (IHI) (Version 2, Kleynhans, C.J., pers. comm., 2015) aims to assess the number and severity of anthropogenic perturbations along a river/stream/wetland and the potential inflictions of damage toward the habitat integrity of the system (Dallas, 2005). Various abiotic (e.g. water abstraction, weirs, dams, pollution, dumping of rubble, etc.) and biotic (e.g. presence of alien plants and aquatic animals, etc.) factors are assessed, which represent some of the most important and easily quantifiable, anthropogenic impacts upon the system.

In accordance with the magnitude of the impact created by the abovementioned criteria, the assessment of the severity of the modifications is based on six descriptive categories ranging between a rating of 0 (no impact), 1 to 5 (small impact), 6 to 10 (moderate impact), 11 to 15 (large impact), 16 to 20 (serious impact) and 21 to 25. Based on available knowledge of the site and/or adjacent catchment, a confidence level (high, medium, low) is assigned to each of the scored metrics.

Each of the allocated scores will then be moderated by a weighting system, which is based on the relative threat of the impact to the habitat integrity of the riverine system. The total score for each impact is equal to the assigned score multiplied by the weight of that impact. The estimated impacts (assigned score / maximum score [25] X allocated weighting) of all criteria are then summed together, expressed as a percentage and subtracted from 100 to determine the PES score (PES; or Ecological Category) for the instream and riparian components, respectively.

However, in cases where selected instream component criteria (i.e. water abstraction, flow, bed and channel modification, water quality and inundation) and/or any of the riparian component criteria exceeded ratings of large, serious or critical, an additional negative weight is applied. The aim of this is to accommodate the possible cumulative effect (and integrated) negative effects of such impacts (Kemper, 1999).

Subsequently, the negative weights will be added for both facets of the assessment and the total additional negative weight subtracted from the provisionally determined integrity to arrive at a final habitat integrity estimate (Kemper, 1999). The eventual total scores for the instream and riparian zone components are then used to place the habitat integrity in a specific habitat integrity ecological category (Table 12-3).

Table 12-3: Ecological Categories for the Habitat Integrity scores

Ecological Category	Description	Score (% of Total)
A	Unmodified, natural.	90 - 100
B	Largely natural with few modifications. A small change in natural habitats and biota may have taken place but the ecosystem functions are essentially unchanged.	80 - 89
C	Moderately modified. A loss and change of natural habitat and biota have occurred but the basic ecosystem functions are still predominantly unchanged.	60-79
D	Largely modified. A large loss of natural habitat, biota and basic ecosystem functions has occurred.	40-59
E	The loss of natural habitat, biota and basic ecosystem functions is extensive.	20-39
F	Modifications have reached a critical level and there has been an almost complete loss of natural habitat and biota. In the worst instances the basic ecosystem functions have been destroyed and the changes are irreversible.	0 - 19

12.4.5.4 Aquatic Macroinvertebrate Assessment

Macroinvertebrate assemblages are good indicators of localised conditions because many benthic macroinvertebrates have limited migration patterns or a sessile mode of life. They are particularly well-suited for assessing site-specific impacts (upstream and downstream studies) (Barbour *et al.* 1999). Benthic macroinvertebrate assemblages are made up of species that constitute a broad range of trophic levels and pollution tolerances, thus providing strong information for interpreting cumulative effects (Barbour *et al.* 1999). The assessment and monitoring of benthic macroinvertebrate communities forms an integral part of the monitoring of the health of an aquatic ecosystem, which includes:

- Integrated Habitat Assessment System;
- South African Scoring System Version 5 (SASS5); and
- Macroinvertebrate Response Assessment Index (MIRAI).

12.4.5.5 Ichthyofaunal Assessment

Fish is considered to be a very important river health indicator whereby their responses to environmental change can be measured utilising the Fish Response Assessment Index (Kleynhans 1999; Kleynhans *et al.*, 2005) through sampling.

12.4.5.6 Fish Response Assessment Index

The number of recorded fish species from sampling and their Frequency of Occurrence (FROC) will be used to supplement data in the Fish Response Assessment Index (FRAI). The information gained using the FRAI provides an indication of the PES of the river based on the fish assemblage structures observed. This allows for the determination of potential driver/changes to the aquatic ecosystem of concern based on fish species expected in the system in comparison to actual species present.

12.4.6 Fauna and Flora

12.4.6.1 Fauna

Plant species present on the site have been identified and listed. The presence of the following plants will be established:

- Those with Red Data status (individual co-ordinates will be taken);
- Those with medicinal uses;
- Those with cultural uses; and
- Those that are declared weeds and invader species.

This will allow for the classification of the different vegetation units (habitats) present. Species composition and habitat diversity will be assessed. The homogenous units identified will be assessed for the presence of the above-mentioned plants. The identification of these units will lead to the recognition of potentially important habitat types for discussion in the

faunal survey. Potential areas of importance, such as those areas where Red Data species of both flora and fauna could occur, will be identified and assessed. This study will indicate the extent and distribution of potential Red Data habitat and the probability that Red Data species actually occur in these habitats.

The impacts of the construction and operation of the proposed mine on the vegetation will be investigated and discussed. This will include the impacts on the presence of certain important species as well as the impacts on habitat diversity. The influence on the ecosystems in the area and their interactions will be assessed and discussed. This will include an assessment of ecosystem services.

This Scoping Report comprises some initial observations of the site, as well as a desktop study of the site and the impacts that are likely to occur. The EIA level specialist report will define the vegetation communities (including habitats), species found on site and the sensitivity of each vegetation community found on site with reference to the proposed mining operation in order to identify and assess impacts and where possible, prescribe mitigation measures.

12.4.6.2 Fauna

The presence of mammals, birds, reptiles, amphibians and terrestrial invertebrates have been investigated during the site survey in February 2020, with emphasis on those with Red Data status in the databases. The presence of these species will be correlated to the vegetation units (habitats) classified during the floral survey. The influence of habitat diversity on species composition will be investigated. The surveys will assess the potential Red Data habitats and indicate the probability that Red Data species occur in these habitats. The current method of sampling for each category of species is described below:

Mammal sampling methods include Sherman traps that are used to sample small mammals. Additionally, any signs of animals or animal scats and spoor are recorded within the study area. Camera traps are used to capture any large mammals. Both the Sherman and camera traps are placed where signs of animal movement are present.

Birds are sampled using sampling points and line transects that are conducted via walks or drives. Opportunistic sightings are recorded, and nests and calls are noted. Point sampling is done at one or several points for a predetermined length of time each day during the sampling method.

Reptiles are sampled using pitfall traps together with active searches such as turning over rocks, looking in trees and termite mounds. Opportunistic sightings are recorded. Amphibians are sampled in the same manner as reptiles, with regular walks around pans within the study area.

Only certain invertebrate groups are sampled and used as indicators, as doing a full invertebrate survey is extremely time-consuming. Butterflies are used as an invertebrate indicator and are caught with an insect net. Baboon spiders are used as an indicator (many are nationally protected). Spider sampling is done by active searching for burrows along transects and identification is achieved by luring the spider out of its burrow (if required and if

possible). Baboon spiders (*Idiothele* sp.) have been found on site and could potentially be Red Data species (species of concern). Each butterfly and spider will be identified to at least family level and where possible to genus and species level.

The impacts of the construction and operation of the proposed mine on the animal life will be investigated and discussed. This will include the impacts on the presence of certain important species as well as the impacts relating to habitat diversity. The influence on the animal life in the ecosystems and their interactions will be assessed and discussed.

12.4.7 Air Quality

12.4.7.1 Emission Inventory

An emission inventory will be undertaken by taking into cognisance the proposed mine infrastructure and planned activities within the footprint. Emissions rates generated will serve as input parameter into the dispersion modelling software: American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). The emissions equations from United States Environment Protection Agency (US EPA) and the Australian National Pollutant Inventory (NPI) will be used to calculate the emissions from various sources.

12.4.7.2 Air Quality Dispersion Modelling

The United States Environmental Protection Agency's Preferred/Recommended Models: AERMOD modelling system will be utilised to simulate all emission scenarios for the different pollutants. The model simulation will assess the emissions from the various sources within the mine boundary and determine the potential contributions from the mine to the ambient air quality of the area. The results will be contour plots (maps) representing the zone of influence.

The predicted zone of influence for each pollutant simulated will be used to assess operational phase impacts and, in some instances, cumulative impacts of the operation on the ambient air quality as it applies to the South African Air Quality standards for compliance.

12.4.8 Noise

An inventory of noise generating machinery and their sound power levels will be conducted. This will be followed by noise modelling to determine the propagation of noise from mine related activities to the surrounding receivers.

The outcome of the model will be compared with the SANS 10103:2008 day and night-time guideline limit values. It is worth mentioning that the results are not a true reflection of the significance of the impact. To specifically determine the significance of the impact the baseline levels are compared to the outcome of the model. An impact assessment will be drafted, which will rate impacts and recommend mitigation measures and management measures.

12.4.9 Socioeconomics

The socio-economic baseline profile was informed by secondary data collection. Digby Wells reviewed the following data sources:

- Government planning and policy documents, including the LLM and WDM IDPs, the Limpopo Employment, Growth and Development Plan (2009-2014) and the Limpopo Development Plan (2015-2019);
- Databases from Statistics South Africa and Wazimap; and
- Available maps and satellite imagery.

Digby Wells collated the available information and summarised the most relevant information to present the socio-economic baseline profile for the study area. The socio-economic baseline considers:

- Demographics, including population size and density as well as population distribution in terms of age and gender;
- Education levels;
- Employment status and income profiles;
- Economic sectors;
- Infrastructure and services (housing, energy, water and sanitation); and
- Community needs and development.

The proposed Project will have both positive and negative impacts within the Project area. Digby Wells will assess these impacts in more detail in the impact assessment phase of the EIA process and will present the findings in a specialist Social Impact Assessment (SIA) report.

12.4.10 Cultural Heritage

12.4.10.1 Secondary Data Collection Methodology

Data collection informs the cultural heritage baseline profile of the study area under consideration. Data was collected through a desktop literature review, which comprised the South African Heritage Resources Information System (SAHRIS) database as well as online electronic journal articles, reference books and select internet sources.

12.4.10.2 Historical layering

Historical layering is a process whereby diverse cartographic sources from various time periods are layered chronologically using Geographic Information Systems (GIS). The rationale behind historical layering is threefold, as it:

- Enables a virtual representation of changes in the land use of a particular area over time;

- Provides relative dates based on the presence or absence of visible features; and
- Identified potential locations where heritage resources may exist within an area.

12.4.10.3 Primary Data Collection

Digby Wells undertook an extensive pre-disturbance survey of the Project in 2012 and 2013, as well as a verification survey of the Project area between 11 and 13 February 2020. The surveys were non-intrusive (i.e. no sampling was undertaken). The aim of the surveys was to:

- Visually record and verify the current state of the cultural landscape; and
- Record a representative sample of the visible, tangible heritage resources present within the development footprint area, site-specific study area and greater study area.

Identified heritage resources were recorded as waypoints using a handheld GPS device. The heritage resources were also recorded through written and photographic records.

12.4.10.4 Site Naming Convention

Following the site naming convention employed in the original HRM process, heritage resources identified by Digby Wells during the field surveys are prefixed by the Digby Wells Project number, followed by the map sheet number. This number is then followed by a reference to the relevant section of the NHRA and suffixed by a site number which represents the heritage resource identified within the Project area, for example: VEN1590/2327CB/S.35 001.

The site name may be shortened on plans or figures to the period/feature code and site number (e.g. S.35-001). Heritage resources identified through secondary data collection were prefixed by the relevant SAHRIS case or map identification number (where applicable) and the original site name as used by the author of that assessment (e.g. 102/Site 1). Table 12-4 presents a list of the relevant period and feature codes.

Table 12-4: Relevant NHRA Section Codes

Feature or Period Code	Reference
S.34	Historical Built Environment
S.35	Archaeological or palaeontological resource
S.36	Burial grounds and graves

Once the impacts are identified, Digby Wells' rating system that takes into consideration the intensity, duration, spatial scale and probability will be used to determine the significance of the identified impacts.

12.5 Item 2(k)(v): Description of proposed method of assessing duration and significance

The Impact Assessment methodology is contained in Table 11-3 above. For cumulative analysis, the following will be considered:

- Existing operations in the areas that could contribute, inter alia, to air pollution, groundwater contamination, surface water contamination, noise and wetland health;
- Potential of blast impacts on surrounding historical resources, communities and mining operations;
- Acid Mine Drainage (AMD) is considered a factor in the general Project area, and will further be considered in the EIA phase;
- Other contributions to surface water pollution; and
- Loss of heritage resources.

12.6 Item 2(k)(vi): An indication of the stages at which the competent authority will be consulted

The competent authority for this Project is the DMRE who will be informed throughout the Mining Right Application and Environmental Authorisation Application processes. The DMRE has also been identified as a Key Stakeholder and will be provided all notifications provided to I&APS, throughout the process. The DMRE will also be invited to attend a site inspection and the public meetings. The following project dates apply to the Project Schedule:

- Submission of the Application Form: 17 April 2020;
- Submission of the Draft Scoping Report for Public Review: 24 June to 24 July 2020;
- Submission of Final Scoping Report: 12 August 2020;
- Assumed submission of the Draft EIA: October/November 2020; and
- Assumed submission of Final EIA: November/December 2020.

12.7 Item 2(k)(vii): Details of the Public Participation Process to be followed during the EIA process

Stakeholder comments gathered during the Scoping Phase and outcomes from the public meetings will be closely considered for further Public Participation activities and inclusion for specialist studies (where applicable). The main emphasis of stakeholder meetings as part of this phase will be to share results of the specialist impact studies completed and the associated suggested mitigation measures and recommendations.

It is anticipated that the Stakeholder Engagement process to be implemented for the EIA phase will be similar to the process undertaken for the Scoping phase. The premise of activities is to adhere to various legislative requirements for Public Participation and that a single, integrated process is followed. This will limit stakeholder fatigue and ensure that stakeholders are presented with a single view of the Project. A public meeting will be held during the EIA Phase to present the findings of the EIA process.

12.8 Item 2(k)(viii): Tasks which will be undertaken as part of the EIA process

The following tasks will be undertaken during the EIA phase:

- Further define the project activities;
- Further assess the project alternatives based on technical, economic, social and environmental criteria;
- Supplement the legal review of the project;
- Undertake detailed specialist investigations;
- Confirm sewage generation volume, treatment technology;
- Confirm water requirements for the different phases of the mine and water resource;
- Identification of possible fatal flaws;
- Assess potential impacts using the methodology provided herein;
- Provide detailed and feasible mitigation and management measures in an EMP; and
- Public participation activities, including public and key stakeholder meetings.

12.9 Item 2(k)(ix): Measures to avoid, reverse, mitigate, or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored

Table 12-5 provides the proposed project activities, potential impact associated with each activity and proposed preliminary mitigation and residual risk, per environmental aspects.

Table 12-5: Environmental Aspects Preliminary Impacts and Mitigation Measures

Activities	Potential impacts	Mitigation type	Potential for residual risk
Surface Water			
Site preparation including vegetation clearance and excavations. Stockpiling of spoils and discard; Construction of accommodation facilities, offices, ablutions, stores, workshops, dams, crushing, screening and washing plants, roads, pipelines, power lines and conveyors.	<ul style="list-style-type: none"> Sedimentation and siltation of nearby watercourses; and Increase of paved surfaces and subsequent increase in surface runoff. 	<ul style="list-style-type: none"> Control through: Limiting vegetation clearance and soil disturbance to the development footprint; Stormwater management planning including installation of drains, berms and storage structures; and no stockpiling should be conducted next to drainage lines; and Remedy through the best practise guidelines for rehabilitation. 	Low
Handling of hydrocarbons and other chemicals; Loading, hauling and transportation of product coal.	<ul style="list-style-type: none"> Contamination of surface water resources leading to deteriorated water quality. 	<ul style="list-style-type: none"> Bunding Control through: Bunding hydrocarbon storage facilities; Use of spill kits and accredited vendors for waste disposal; training of personnel in proper hydrocarbon and chemical handling. Implementation of a stormwater management plan for the diversion and containment of dirty water; and Remedy through the implementation of best management practices. 	Medium
Mine activities such as the operation of the coal wash plant, dust suppression, water abstractions from the Limpopo River and groundwater resources.	<ul style="list-style-type: none"> Reduction of water availability for other water users. This impact is worsened by the dominance of endoreic areas, low MAP and much higher evaporation indicating low water availability in the study area. 	<ul style="list-style-type: none"> Control through: Limiting vegetation clearance and soil disturbance to the development footprint; Stormwater management planning including installation of drains, berms and storage structures; and no stockpiling should be conducted next to drainage lines; and Remedy through the best practise guidelines for rehabilitation. 	Medium
Groundwater			
<ul style="list-style-type: none"> Site / vegetation clearance; Diesel storage and explosives magazine; Operation of the crushing, screening and washing plants; Operation of the sewage treatment plant; Storage, handling and treatment of hazardous products and waste; Maintenance activities; and Post-closure monitoring. 	<ul style="list-style-type: none"> Groundwater contamination; Increased surface water runoff potential, reducing the recharge to groundwater aquifers; and Groundwater contamination as a result of poor maintenance to dirty water management facilities and stockpile areas. 	<ul style="list-style-type: none"> Control through management, design and monitoring procedures; and Remedy through best practise guidelines for rehabilitation. 	Low
<ul style="list-style-type: none"> Open pit establishment; Removal of rock; Operation of the open pit workings; and Stockpiling establishment and operation. 	<ul style="list-style-type: none"> Dewatering the groundwater aquifer and associated surface water ecosystems, which are dependent on groundwater contributions. Exposure of sulphate minerals to oxidising environments causing the formation of acid mine drainage. 	<ul style="list-style-type: none"> Control through management and monitoring; and Remedy through concurrent rehabilitation. 	High
Operation of the crushing, screening and washing plants.	<ul style="list-style-type: none"> Groundwater contamination. 	<ul style="list-style-type: none"> Control through management, design, monitoring and maintenance procedures; and Remedy through concurrent rehabilitation. 	Medium

Activities	Potential impacts	Mitigation type	Potential for residual risk
Water use and storage on site	<ul style="list-style-type: none"> Unsustainable abstraction from the groundwater aquifers (for water supply purposes) resulting in dewatered aquifer and associated surface water ecosystems which are dependent on groundwater contributions; and Groundwater contamination as a result of poor dirty water management systems (i.e. PCD). 	<ul style="list-style-type: none"> Modify through alternative water supply options; and Control through management, design and monitoring procedures. 	Medium
<ul style="list-style-type: none"> Rehabilitation; and Post-closure monitoring 	<ul style="list-style-type: none"> Reduction in groundwater contamination as surface stockpile and waste rock dump material is backfilled into open voids; and Recovery of the water table in dewatered areas. 	<ul style="list-style-type: none"> Remedy through best practise guidelines for rehabilitation; and Control through management and monitoring procedures. 	Medium
Soils			
Site clearing, preparation and excavations.	<ul style="list-style-type: none"> Changing the current land use; wildlife, natural grassland and fallow land to mining. 	<ul style="list-style-type: none"> Before mining activities start, ensure rehabilitation, mitigation and management measures to be in place; and Insure minimum loss to the natural land use and good rehabilitation measures for high land usages for life after mine. 	High
Site clearing, removal of vegetation and movement of heavy machinery.	<ul style="list-style-type: none"> Site clearing, removal of vegetation and movement of heavy machinery. 	<ul style="list-style-type: none"> Rehabilitation, design measures such as landscaping, contours; Ensure proper storm water management designs are in place; and If any erosion occurs, corrective actions (erosion berms) must be taken to minimise any further erosion from taking place. 	High
Topsoil stripped and stockpiled.	<ul style="list-style-type: none"> Major disturbance to the functionality and productivity of the soil which may result in a loss of topsoil, erosion, organic material depletion in the topsoil. 	<ul style="list-style-type: none"> When stripping is carried out, make sure that the soils are stripped per soil horizon. Revegetate stockpiles to prevent loss of organic material, erosion and leaching of the soils; Clearing and removal of soils should be done during dry months (May to September) to reduce erosion and compaction on soils; Ensure proper storm water management designs are in place; If any erosion occurs, corrective actions (erosion berms) must be taken to minimise any further erosion from taking place; Only designated access routes should be used to reduce any unnecessary compaction; and An emergency spillage response plan should be in place and spill kits accessible to the responsible monitoring team. 	High
Hydrocarbon leaks from vehicles and machinery or hazardous materials such as oil and fuel spills.	<ul style="list-style-type: none"> Chemical soil pollution, loss of basal cover, organic matter and soil fertility and soil contamination. 	<ul style="list-style-type: none"> Runoff must be controlled and managed by use of proper storm water management facilities; Remediate using commercially available emergency clean up kits; Place drip trays where leaks occur or in case vehicles are leaking; All vehicles are to be serviced in a correctly concrete area or at an off-site location; and Machines must be parked on bunded, hardstanding areas and must be checked daily for fluid leaks. 	Medium
Construction vehicles, roads and linear infrastructure.	<ul style="list-style-type: none"> Soil compaction, low vegetation growth, high runoff potential, increased erosion. 	<ul style="list-style-type: none"> Follow design measures; Avoid relocation of infrastructure; Control construction through management and monitoring; Rehabilitation as soon as possible; and Keep to dedicated tracks and avoid new roads forming. 	High

Activities	Potential impacts	Mitigation type	Potential for residual risk
Hazardous substance spillage from pipelines or waste storage.	<ul style="list-style-type: none"> Soil Contamination. Loss of utilisable soil as a resource – erosion, contamination, compaction, loss of land capability and land use. 	<ul style="list-style-type: none"> Prevent any spills from occurring; If a spill occurs it is to be cleaned up (Drizit spill kit/ Zupazorb / Enertech type spill kit, Oil or Chemical spill kit) immediately and reported to the appropriate authorities; Pipelines must be checked regularly for leaks; Pipelines must be maintained; and Ensure emergency response plans are in place. 	Medium
All mining activities and associated infrastructure	<ul style="list-style-type: none"> Land capability of the soils will decrease as well as changing the land use from agricultural practices to mining activities. Should the area not be rehabilitated to pre-mining land capability after mining operations, the land capability may be reduced to wilderness. 	<ul style="list-style-type: none"> Ensure mitigation, rehabilitation and monitor plans are done before mining activities commence; and Rehabilitation should start from the first day of the construction phase to ensure continuous rehabilitation. 	High
Wetlands			
Construction phase of an open cast mine through depression pan wetlands/sections thereof.	<ul style="list-style-type: none"> Loss of wetland habitat, compaction of soils, sedimentation, pollution and alien invasive plant establishment. 	<ul style="list-style-type: none"> Control impact of moisture displacement the proposed activities may have on the sustainability of infrastructure development and the environment by obtaining input from a hydrogeologist. This is to advise on the impact of moisture displacement the proposed activities may have on the sustainability of infrastructure development and the environment; and Control changes to the flowpaths and storage mechanisms in the soil to sustain hydrological and biogeochemical connectivity by minimising disturbance to the soil profile. 	Medium
Operation of the open cast mine through a pan wetland/section thereof.	<ul style="list-style-type: none"> Permanent loss of wetland habitat and hydrological connectivity in the landscape, pollution, invasion of alien invasive species. 	<ul style="list-style-type: none"> Control potential erosion by taking into account soil characteristics including their erodibility and recharge properties; Control permanent changes to regional hydrology; Control of alien invasive plants should Control the outcomes of reestablishment of wetland function after mining through rehabilitation by investigation through a multidisciplinary team and review of relevant case studies where this has been achieved in the past; and Avoid wetland loss or formulate a wetland offset strategy should the wetlands be mined. 	High
Aquatics			
Site clearing, including the removal of vegetation and topsoil.	<ul style="list-style-type: none"> Spread of alien and invasive species; Change in hydrology; Increased incidence of erosion; Sedimentation from erosion; Potential water degradation; and Loss of biodiversity. 	<ul style="list-style-type: none"> Control through management and monitoring procedures to prevent unnecessary clearing of extensive areas not part of the direct footprint area; Control the edge of the non-directly impacted freshwater resources through demarcation as no-go zones that will last for the duration of the construction phase; Control by monitoring freshwater resources during the construction phase; Management and monitoring of alien and invasive plant species during the construction phase; and Control through developing and implementing the Storm Water Management Plan. This must be in operation prior to the construction phase and freshwater resources must be highlighted as sensitive receptors. 	Medium

Activities	Potential impacts	Mitigation type	Potential for residual risk
<p>Construction of mine related infrastructure including access and haul roads; diesel storage and explosives magazine; topsoil stockpiling.</p>	<ul style="list-style-type: none"> • Increased incidence of erosion; • Sedimentation from erosion; • Potential water degradation as a result of diesel spills; and • Loss of biodiversity. 	<ul style="list-style-type: none"> • Control through the construction of clean and dirty water separation systems on site to prevent mining activities from contaminating the receiving environment; • Control through a soil management programme to minimise erosion and sedimentation; • Remedy through actively re-vegetating disturbed areas immediately after construction; • Control through installing vegetation covers on all topsoil stockpiles; • Control through Implementing and maintaining an alien vegetation management programme; • Control through installation of erosion berms on roadways and downstream of stockpiles and waste rock dumps. The following points should serve to guide the placement of erosion berms: <ul style="list-style-type: none"> • Where the track has a slope of less than 2%, berms every 50m should be installed; • Where the track slopes between 2% and 10%, berms every 25m should be installed; • Where the track slopes between 10%-15%, berms every 20m should be installed; and • Where the track has a slope greater than 15%, berms every 10m should be installed. • Control the edge of the non-directly impacted freshwater resources through demarcation as no-go zones that will last for the duration of the construction phase; • Control through demarcating all areas of increased ecological sensitivity as “No-Go” areas and be off limits to all unauthorised vehicles and personnel; and • Control by re-fuelling on a sealed surface area away from aquatic areas to prevent ingress of hydrocarbons into topsoil. 	<p>Medium</p>
<p>Construction of open pits in aquatic areas including removal of rock (blasting); water use and storage; storage and handling of hazardous products including fuel, explosives, oil and waste.</p>	<ul style="list-style-type: none"> • Increased potential for erosion, sedimentation and deposition impacts; • Loss of water quality; and • Loss of habitat and biodiversity. 	<ul style="list-style-type: none"> • No mitigation potential for this activity. 	<p>High</p>

Activities	Potential impacts	Mitigation type	Potential for residual risk
<ul style="list-style-type: none"> • Stripping topsoil and soft overburden; loading, hauling and stockpiling. • Use and maintenance of haul roads for the transportation of coal. • Operational pit activities, including excavation and dewatering; operating sewage treatment plant. • Rehabilitation of site and dismantling of infrastructure. • Rehabilitation, including spreading of soil, re-vegetation and profiling or contouring 	<ul style="list-style-type: none"> • Increased potential for erosion, sedimentation and deposition impacts; • Loss of water quality; • Loss of habitat and biodiversity; • Fragmentation of the freshwater resources as a result of road crossings; • Contamination of freshwater resources; • Increased potential for sheet runoff from paved/cleared surfaces; • Surface water runoff, ultimately resulting in a loss of catchment yield; and • Disturbed soils may give rise to the spread and proliferation of alien and invasive species 	<ul style="list-style-type: none"> • Control through management and monitoring procedures to prevent unnecessary clearing of extensive areas not part of the direct footprint area; • Control the edge of the non-directly impacted freshwater resources through demarcation as no-go zones; • Control through demarcating all areas of increased ecological sensitivity as “No-Go” areas and be off limits to all unauthorised vehicles and personnel; • Control by monitoring freshwater resources; • Control through a soil management programme to minimise erosion and sedimentation; • Remedy through actively re-vegetating disturbed areas immediately after construction; • Control through installation of erosion berms on roadways and downstream of stockpiles and waste rock dumps. The following points should serve to guide the placement of erosion berms: <ul style="list-style-type: none"> • Where the track has a slope of less than 2%, berms every 50m should be installed; • Where the track slopes between 2% and 10%, berms every 25m should be installed; • Where the track slopes between 10%-15%, berms every 20m should be installed; and • Where the track has a slope greater than 15%, berms every 10m should be installed. • Remedy through actively re-vegetating disturbed areas immediately after construction; • Control through implementing and maintaining an alien vegetation management programme; • Control through installing vegetation covers on all topsoil stockpiles; • Control through disallowing the dumping of material within any freshwater resources in the vicinity of the proposed footprint area; • Prevent leaks by inspecting vehicles regularly; • Control by re-fuelling on a sealed surface area away from aquatic areas to prevent ingress of hydrocarbons into topsoil; • Remedy all spills immediately by cleaning up accordingly; • Control by providing appropriate sanitary facilities for the duration of the construction activities and all waste must be removed to an appropriate waste facility; • Control by disallowing vehicles or heavy machinery to drive indiscriminately within any aquatic areas or their buffer areas; • Control through inspecting vehicles for leaks regularly; • Control by re-fuelling on a sealed surface area away from aquatic areas to prevent ingress of hydrocarbons into topsoil; and • Remedy through cleaning up leaks immediately. 	<p>Low</p>

Activities	Potential impacts	Mitigation type	Potential for residual risk
Post-mining decants into freshwater resources.	<ul style="list-style-type: none"> Loss of habitat integrity and ecosystem services such as toxicant removal and water for human use; Loss of water quality to downstream freshwater resources; and Loss of biodiversity and sensitive fauna and flora. 	<ul style="list-style-type: none"> Remedy any post-mining decant within riverine areas through treating this water prior to release into the environment; and Control through considering passive water treatment options, as this is more sustainable for the post-closure scenario. 	Low
Fauna and Flora			
All mining activities such as excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, crushing, screening and washing plants, storm water control, berms, roads, pipelines, power lines and conveyors.	<ul style="list-style-type: none"> Loss of plant communities, loss of biodiversity, fragmentation of the ecosystem, degradation of ecosystem services, loss of floral SSC and loss of faunal SSC. 	<ul style="list-style-type: none"> Control through management measures and if necessary, modify through alternative method; and Remedy through the rehabilitation practices and guidelines presented. 	High
Removal of vegetation for proposed mining activities.	<ul style="list-style-type: none"> Habitat fragmentation, soil disturbance and compaction, edge effect and introduction of alien invasive species. 	<ul style="list-style-type: none"> Control through management and monitoring procedures; and Remedy through the best practice guidelines to minimise impacts and promote rehabilitation of affected areas. 	High
Air Quality			
Site clearing (removal of vegetation), access and haul road construction, infrastructure construction, and topsoil removal and stockpiling.	<ul style="list-style-type: none"> Reduction in the quality of ambient air due to dust generation and the release of gaseous pollutants from machinery. 	<ul style="list-style-type: none"> Dust control measures; Design measures; and Control through management and monitoring. 	Low
<ul style="list-style-type: none"> Diesel storage and explosive magazine; Storage, handling and treatment of hazardous products (including fuel, explosives, and oil) and waste. 	<ul style="list-style-type: none"> Spilling and the release of gases via vaporisation. 	<ul style="list-style-type: none"> Design measures; and Control through management and monitoring. 	Low
<ul style="list-style-type: none"> Open-pit establishment; Removal of rock (blasting); Operation of the underground workings; Operation of the crushing, screening and washing plants. 	<ul style="list-style-type: none"> Reduction in the quality of ambient air due to dust generation and the release of gaseous pollutants from off-road machinery. 	<ul style="list-style-type: none"> Dust control measures; Design measures; and Control through management and monitoring. 	Low
Stockpiling (rock dumps, soils, ROM, discard dump) establishment and operation.	<ul style="list-style-type: none"> Reduction in the quality of ambient air due to dust generation and the release of gaseous pollutants from off-road machinery. 	<ul style="list-style-type: none"> Dust control measures; Design measures; and Control through management and monitoring. 	High
Operating sewage treatment plant.	<ul style="list-style-type: none"> Reduction in the quality of ambient air due to the release of noxious gases. 	<ul style="list-style-type: none"> Design measures; and Control through management and monitoring. 	Medium
Maintenance activities	<ul style="list-style-type: none"> Reduction in the quality of ambient air due to the release of dust and gaseous pollutants. 	<ul style="list-style-type: none"> Design measures; and Control through management and monitoring. 	Low
Demolition and removal of infrastructure.	<ul style="list-style-type: none"> Reduction in air quality due to dust generation. 	<ul style="list-style-type: none"> Dust control measures; Design measures; Control through management and monitoring; and Remedy through rehabilitation. 	Low

Activities	Potential impacts	Mitigation type	Potential for residual risk
Noise			
Site clearing and construction of infrastructure and stockpiling.	<ul style="list-style-type: none"> Noise emanating from machinery while conducting these activities can impact the surrounding sensitive receptors. 	<ul style="list-style-type: none"> Noise control measures; Design measures; and Control through management and monitoring. 	Low
Open pit establishment, Stockpiling, operation of the opencast workings, operation of the crushing, screening and washing plants.	<ul style="list-style-type: none"> Noise emanating from machinery while conducting these activities can impact the surrounding sensitive receptors. 	<ul style="list-style-type: none"> Noise control measures; Design measures; and Control through management and monitoring. 	High
Decommissioning.	<ul style="list-style-type: none"> Noise emanating from machinery while conducting these activities can impact the surrounding sensitive receptors. 	<ul style="list-style-type: none"> Noise control measures; Design measures; and Control through management and monitoring. 	Low
Socio-Economic			
Pre-construction and construction activities	<ul style="list-style-type: none"> Loss of existing livelihoods / economic displacement. 	<ul style="list-style-type: none"> Remedy or control through livelihood restoration measures. 	High
<ul style="list-style-type: none"> Construction of Infrastructure and establishment of opencast pit; and Operation of the Project. 	<ul style="list-style-type: none"> Creation of temporary employment opportunities; and Knock-on or multiplier effects on local and regional economy. 	<ul style="list-style-type: none"> Enhance positive impacts. 	Medium
<ul style="list-style-type: none"> Construction of Infrastructure and establishment of opencast pit; Operation of the Project. 	<ul style="list-style-type: none"> Potential negative impacts to community health, safety and security (through population influx, increased dust and noise, traffic, blasting) and degraded sense of place. 	<ul style="list-style-type: none"> Control or remedy through individual management plans for these components. 	Low
Operation of the Project	<ul style="list-style-type: none"> Increased competition for underground water resources between the communities and the mines (and other mines) in the area. 	<ul style="list-style-type: none"> Control through implementation of suitable measures to reduce the negative impacts. 	High
Operation of the Project	<ul style="list-style-type: none"> Potential transboundary impacts on communities located in close proximity to the Project in Botswana. 	<ul style="list-style-type: none"> Control or remedy through individual management plans based on the negative impacts experienced. 	Medium
Decommissioning	<ul style="list-style-type: none"> Loss of employment opportunities and knock-on or multiplier effects on local and regional economy. 	<ul style="list-style-type: none"> Control through implementation of sustainable measures to enhance positive impacts. 	Low
Cultural Heritage			
Establishment of opencast pit and surface infrastructure.	<ul style="list-style-type: none"> The establishment of the pit and surface infrastructure may affect heritage resources afforded general protection under Sections 34 and 36 of the NHRA (i.e. historical buildings and burial grounds and graves respectively). 	<ul style="list-style-type: none"> Proactive – avoid. 	Medium
Establishment of opencast pit and surface infrastructure.	<ul style="list-style-type: none"> The establishment of the pit and surface infrastructure may affect heritage resources afforded general protection under Section 35 of the NHRA (i.e. archaeological and palaeontological material). 	<ul style="list-style-type: none"> Reactive – minimise impact. 	Low

13 Item 2(I): Other information required by the competent authority

In accordance with the provisions of Regulation 23(3) of the EIA 2014 Regulations (as amended) the EIA should include all information required as set out in Appendix 3 and in terms of Regulation 23(4) the EMP should contain all information required as set out in Appendix 4. The Competent Authority has not requested any other information. The EIA report must include the following:

- Details of the EAP who prepared the report and the expertise of the EAP, including a curriculum vitae;
- A plan, which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale;
- A description of the scope of the proposed activity;
- A description of the policy and legislative context within which the development is located and an explanation of how the proposed development complies with and responds to the legislation and policy context;
- A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location;
- A full public participation process including a CRR in the EIA report;
- Impact Assessment, including methodology, of the necessary environmental aspects, including the nature, significance, extent, duration and probability of the impacts occurring, positive and negative impacts, including mitigation and monitoring measures;
- An assessment of the proposed alternatives;
- A complete EMPr;
- An impact statement from the EAP, specific information the Competent Authority may require, and conditions for approval; and
- An EAP oath regarding the correctness of information provided in the report.

13.1 Impact on the socio-economic conditions of any directly affected person

The positive impacts of the proposed Project can be summarised as follows:

The Dalyshope Coal Mining Project is expected to be operational for 30 years. Thus, positive impacts relate to the creation of jobs and business opportunities. Employment as well as the additional infrastructure will contribute to the overall socio-economic profile of the region.

The negative impacts of the proposed Project can be summarised as follows:

The Project will impact on surrounding landowners who utilise their farms for various agricultural activities from which they source their income and maintain their livelihoods.

Also, the negative impacts are associated with population influx as job seekers move into the area. The population influx may result in increased demand on health and emergency services, conflict and xenophobia between residents and job seekers, increase in crime and other social issues.

13.2 Impact on any National Estate referred to in Section 3(2) of the National Heritage Resources Act

A full Heritage Impact Assessment will be undertaken during the EIA Phase in compliance with Section 38 of the NHRA. Any resources identified on site will be recorded, labelled and the appropriate mitigations applied.

14 Other matters required in terms of Sections 24(4)(a) and (b) of the Act

Section 24(4)(b)(i) of the NEMA provides that an investigation must be undertaken of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity. Refer to Section 9.1 for alternatives assessed. Refer to section 10.13 above for the cultural heritage baseline.

15 Undertaking regarding correctness of information

I, Xan Taylor, herewith undertake that the information provided in the foregoing report is correct, and that the comments and inputs from stakeholders and Interested and Affected parties has been correctly recorded in the report.

Signature of the EAP:



Date:

March 2020

16 Undertaking regarding level of agreement

I, Xan Taylor, herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with interested and Affected Parties and stakeholders has been correctly recorded and reported herein.

Signature of the EAP:



Date: March 2020

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Appendix A: EAPs CV and Qualifications



Ms Xanthe Taylor
Environmental Consultant
Environmental Management Services
Digby Wells Environmental

1 Education

2013: BA Honours Environmental Management – UNISA.

2009: BA English and Psychology – UNISA.

2 Language Skills

English – Excellent

Afrikaans – Proficient

German – Intermediate

3 Employment

July 2015 – present: Digby Wells Environmental – Environmental Consultant.

2012 – July 2015: Clean Stream Environmental Consultants (Pty) Ltd. – Junior Environmental Scientist.

4 Experience

Xanthe Taylor started working in the industry whilst completing her Honours degree, in 2012. Xanthe joined Digby Wells Environmental in 2015 and has almost eight years' experience. The majority of Xanthe's experience is in the mining sector applying for applications governed by the National Environmental Management Act, 1998 (Act No. 107 of 1998) for both the 2010 and 2014 Regulations thereunder, the Minerals and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), the National Water Act, 1998 (Act No. 36 of 1998), as well as international legislation, International Finance Corporation Performance Standards and World Bank Guidelines.

Her experience comprises managing integrated mining applications: compiling application forms, Basic Assessment reports, Scoping reports, Environmental Impact Assessment reports, Environmental Management Programmes, international Environmental and Social Impact Assessments, NEMA Regulation 29 and Regulation 31 Amendment reports, Section 102 Amendment reports, exemption applications, Appeals processes, and auditing.

5 Project Experience

- Anglo Thermal – Coal Landau Colliery EIA and EMP;
- Barplats Mines Limited – Eastplats Crocodile River Mine Basic Assessment and EMP Amendment;
- Blyvoor Gold Capital – Blyvoor Gold Mining Project EIA and WUL;
- Botterkloof Holiday Resort Water Use Licence Legal Assessment;
- Canyon Coal (Pty) Ltd – Palmietkuilen Coal Mine Project EIA and WUL;
- City of Tshwane Department of Human Settlements – Pretoriuspark Extension 40 Housing Development Basic Assessment and WUL;
- Dagsoom Coal Mining (Pty) Ltd – Twyfelaar Coal Mine Project EIA ;
- DRA Legal Gap Analysis for Tshipi Borwa Mine;
- Eskom Group Capital – Lambda Substation and Transmission Line EMP and WUL;
- Exxaro Resources – Grootegleuk Section 29 Amendment;
- Exxaro Coal Central (Pty) Ltd – Dorstfontein East Expansion EIA and WUL;
- Msobo Coal (Pty) Ltd. – Verkeerdepan Extension Project;
- Glencore Operations South Africa (Pty) Ltd – Tweefontein Colliery Road Realignment EIA;
- International Mining & Infrastructure Corporation Plc – Ntem Iron Ore Project ESIA Pre-Feasibility Study, Cameroon;
- Mawetse Mining Corporation Mining Right Application;
- Namane Resources (Pty) Ltd – IPP and Transmission Line Project EIA;
- Randgold Resources – Kibali Gold Mine Environmental Awareness Training, DRC;
- Randgold Resources – Kibali Gold Mine: Megi ESIA, DRC;
- Rand Uranium (Pty) Ltd – Cook Operations Section 31 Amendment;
- RSV ENCO – Fatal Flaw Analysis;
- Sasol Mining (Pty) Ltd – Syferfontein Mine EMP Performance Assessment;
- Sasol Mining (Pty) Ltd – Brandspruit Mine EMP Performance Assessment;
- Sierra Rutile Limited – Engineered Landfill Site at Mokula, Sierra Leone;

- Stuart Coal (Pty) Ltd. – South Block Colliery, Weltevreden and Est Collieries;
- Stuart Coal (Pty) Ltd – East, South and Weltevreden Colliery Water Use Licence Audit; 2012, 2013, 2014;
- Stuart Coal (Pty) Ltd – East, South and Weltevreden EMP Performance Assessment Audit, 2014;
- Stuart Coal (Pty) Ltd - Weltevreden Colliery Water Treatment Plant Project;
- South32 Coal Holdings (Pty) Ltd – Klipspruit Colliery EIA/EMP Alignment Project
- South32 Coal Holdings (Pty) Ltd – Klipspruit Colliery Water Treatment Plant EIA and WUL; and
- Xivono Mining (Pty) Ltd – Weltevreden Coal Project EIA and WUL

6 Professional Affiliations

International Association for Impact Assessment South Africa

7 Professional Registration

Environmental Assessment Practitioners Association of South Africa – Professional Registration Pending



We certify that

Xanthe Lea Taylor

*having complied with the requirements of the Higher Education Act
and the Institutional Statute, was admitted to the degree of*

BACHELOR OF ARTS

at a congregation of the University

on 20 April 2010

I CERTIFY THAT THIS DOCUMENT IS A TRUE REPRODUCTION (COPY) OF THE ORIGINAL DOCUMENT WHICH WAS HANDED TO ME FOR AUTHENTICATION. I FURTHER CERTIFY THAT FROM MY OBSERVATION, AN AMENDMENT OR CHANGE WAS NOT MADE TO THE ORIGINAL DOCUMENT.

Mashi
COMMISSIONER OF OATHS
TRUST MASHAWI
POSTNET MENLYN
SPRINGS WATERGLEN CENTRE
MANNINGHAM ROAD
WATERGLEN OF GLEN

DATE: 15/6/15
REF. NO. 9/1/8/2 PRETORIA
2009/07/08

[Signature]

Vice-Chancellor

[Signature]

University Registrar



[Signature]

Executive Dean





We certify that

XANTHE LEA TAYLOR

*having complied with the requirements of the Higher Education Act
and the Institutional Statute, was admitted to the degree of*

HONOURS BACHELOR OF ARTS

in Environmental Management

*at a congregation of the University
on 24 April 2013*

I CERTIFY THAT THIS DOCUMENT IS A TRUE REPRODUCTION
(COPY) OF THE ORIGINAL DOCUMENT WHICH WAS HANDED
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Mash
COMMISSIONER OF OATHS
TRUST MASHAWI
POSTNET MENLYN
SHOP 33 WATERGLEN CENTRE
GARSFONTEIN ROAD
WATERKLOOF GLEN

DATE: *15/6/13*
REF. NO. 9/1/8/2 PRETORIA
2009/07/08

M. Madhavan

Vice-Chancellor

J. J. J. J.

University Registrar



M. Light

Executive Dean





Appendix B: Plans

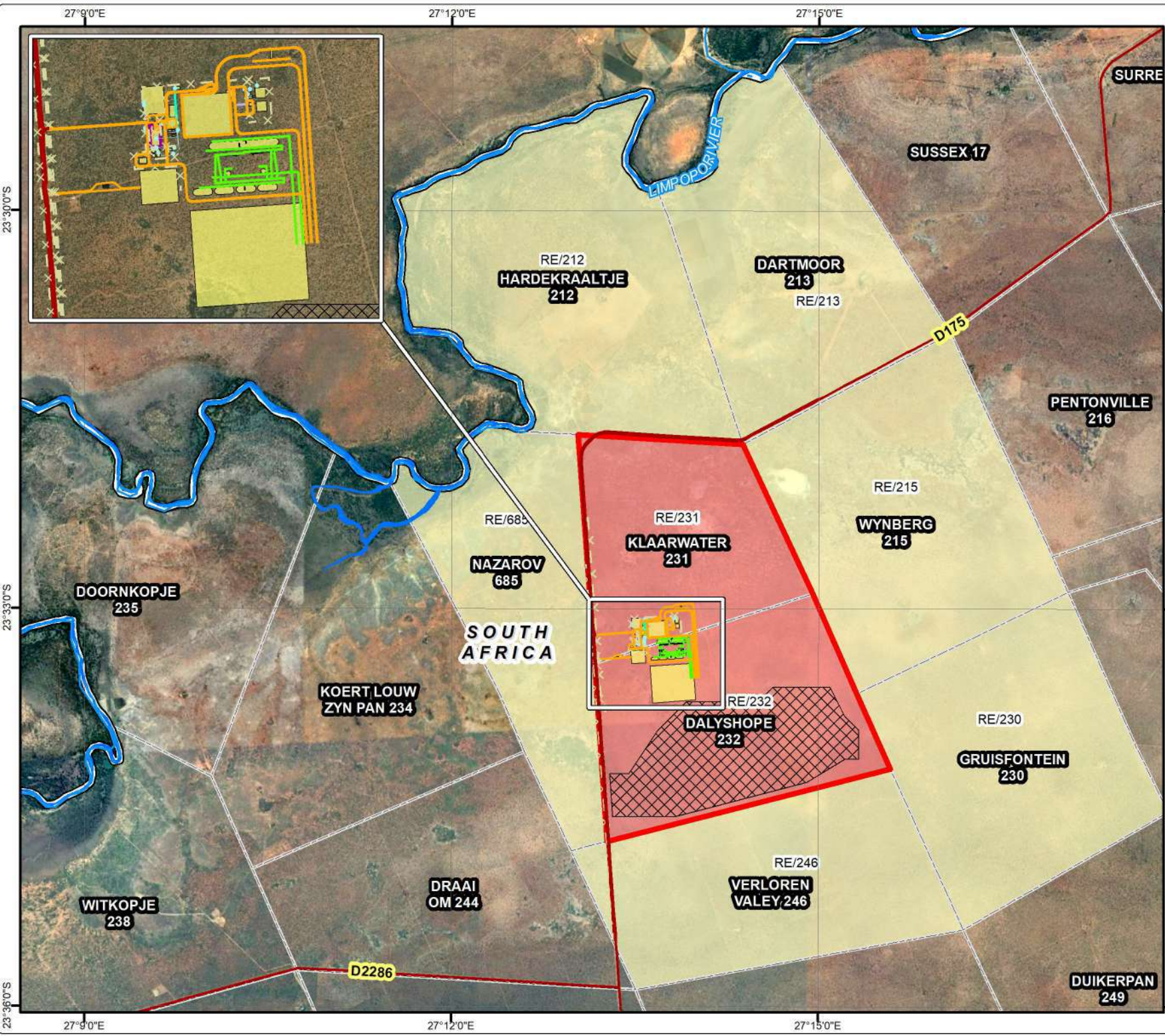
Plan 1: Land Tenure Map

Plan 2: Regional Setting

Plan 3: Locality Map

Plan 4: Infrastructure Layout Plan

Plan 5: Detailed Layout of Mining-Related Infrastructure



Dalyshope Coal Mine

Land Tenure

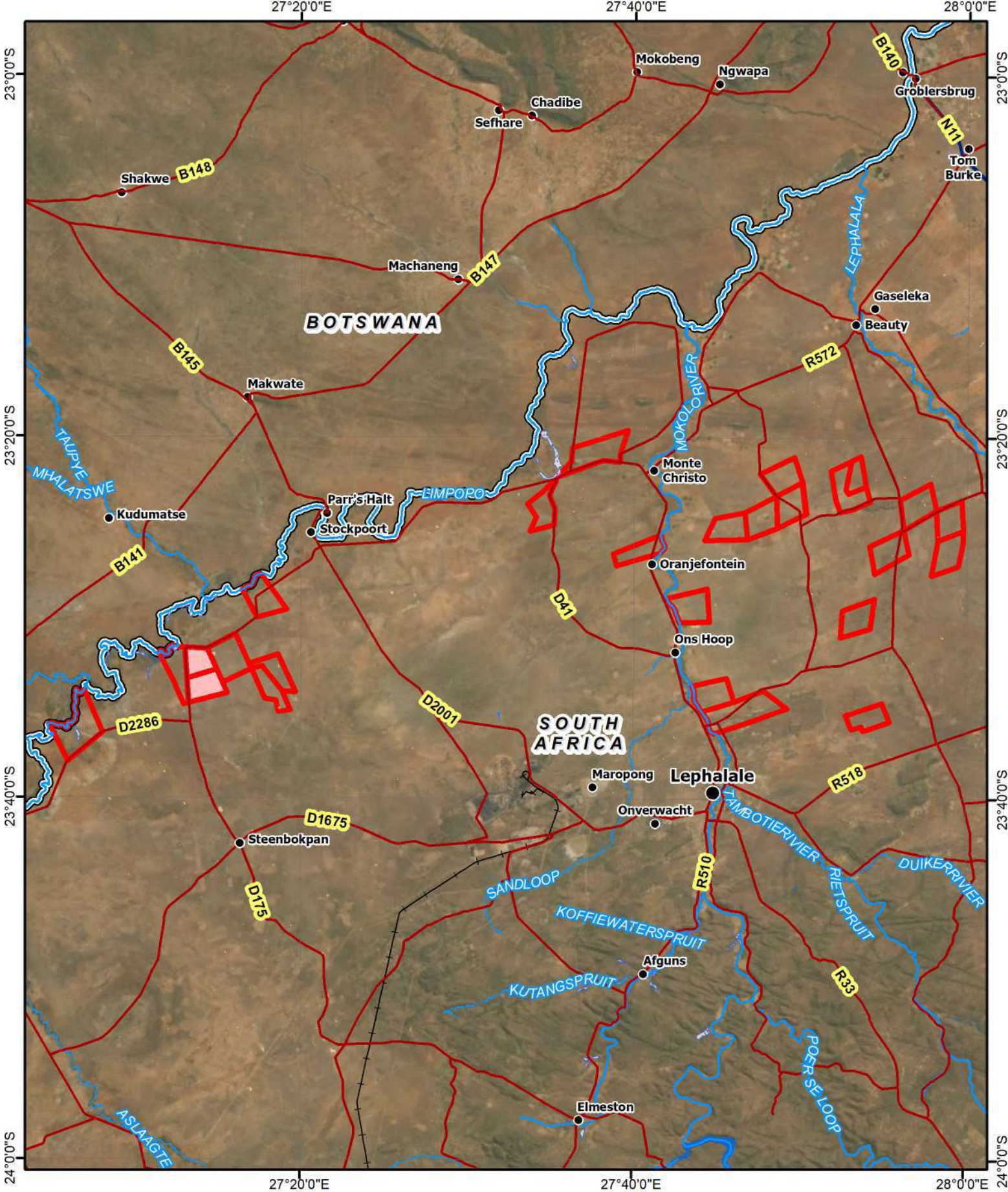
Legend

- Project Area
- Main Road
- Perennial Stream
- International Boundary
- Land Tenure**
- Directly Affected
- Indirectly Affected
- Parent Farm
- Infrastructure Layout**
- Access Road
- Trunk Access Road
- Conveyor
- Fence
- Pipeline
- Pollution Drain
- Sewer
- Walkway
- Plant
- Infrastructure
- Open Cast Pit (OC1)



Projection: Transverse Mercator
 Datum: WGS 1984
 Central Meridian: 27°E
 Date: 12/03/2020
 Ref #: UCD6170_SR_01_KR





Dalyshope Coal Mine: Regional Setting & Mining Right Boundary

- Legend**
- Mining Right Boundary
 - Project Area
 - Main Road
 - National Road
 - Major Town
 - Settlement
 - Railway Line
 - Perennial Stream
 - Non-Perennial Stream
 - Dam / Lake
 - Non-Perennial Pan
 - Marsh / Swamp
 - International Boundary

Projection: Transverse Mercator
 Central Meridian: 27°E
 Datum: WGS 1984
 Date: 09/03/2020
 Ref #: UCD6170_W_01_KR

0 5 10 20
 Kilometres



27°10'0"E

27°15'0"E

27°20'0"E

23°25'0"S

23°25'0"S

23°30'0"S

23°30'0"S

23°35'0"S

23°35'0"S

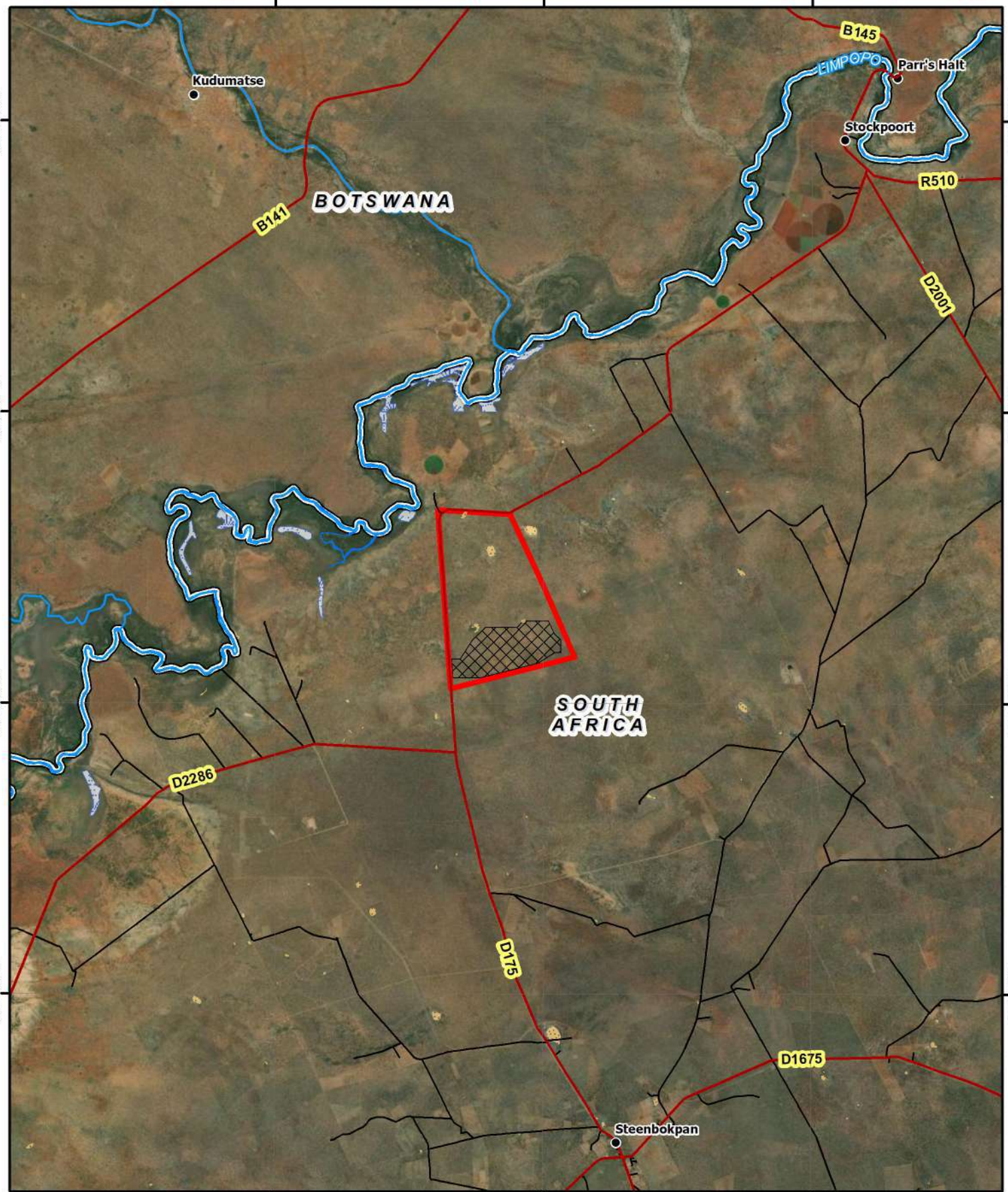
23°40'0"S

23°40'0"S

27°10'0"E

27°15'0"E

27°20'0"E



Dalyshope Coal Mine: Local Setting

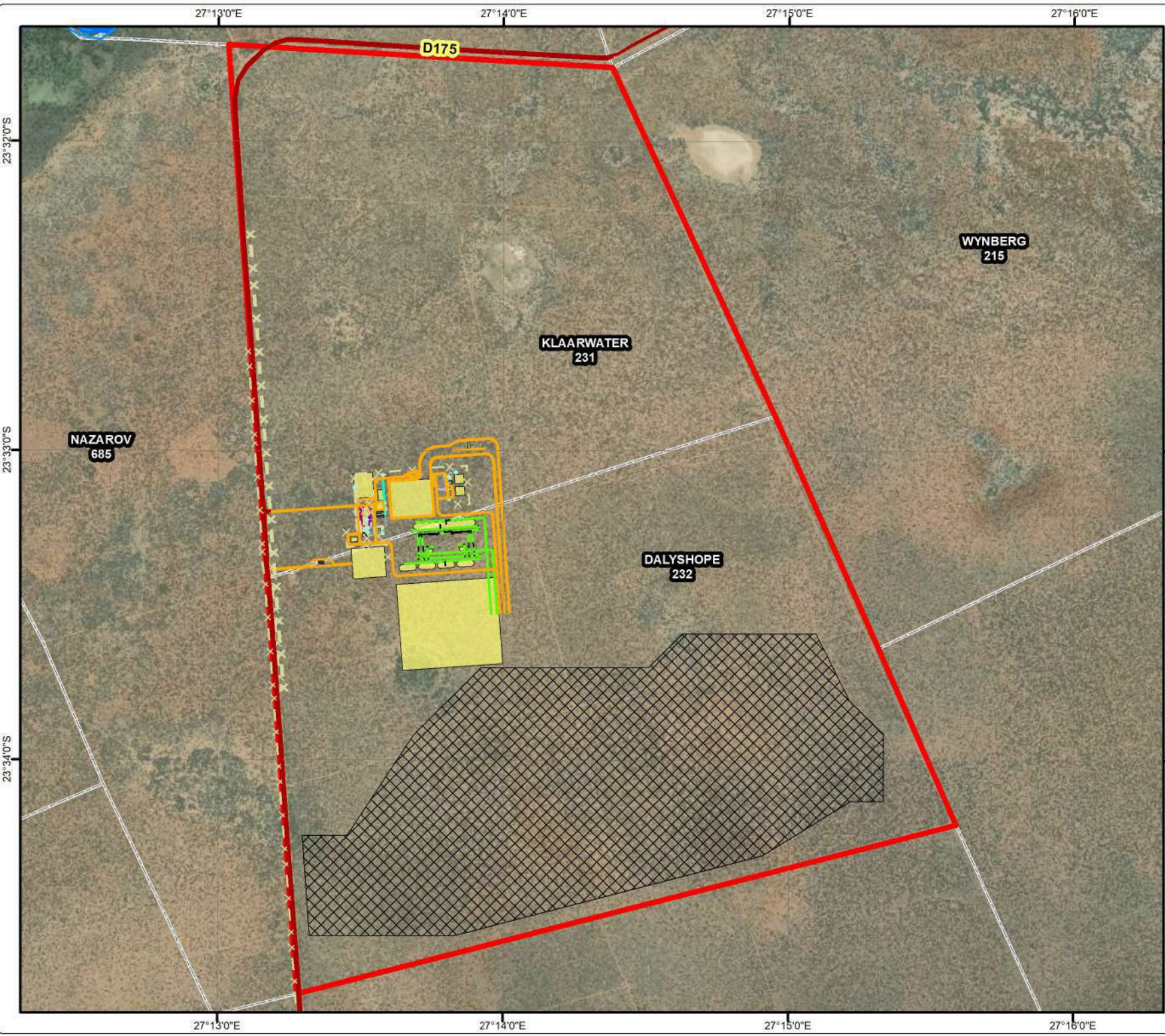
Legend

- | | |
|---|---|
| <ul style="list-style-type: none"> Project Area Open Cast Pit (OC1) Settlement Main Road Street | <ul style="list-style-type: none"> Perennial Stream Dam / Lake Non-Perennial Pan Marsh / Swamp International Boundary |
|---|---|

Projection: Transverse Mercator
 Central Meridian: 27°E
 Datum: WGS 1984
 Date: 12/03/2020
 Ref #: UCD6170_SR_02_KR



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Dalyshope Coal Mine

Infrastructure Layout

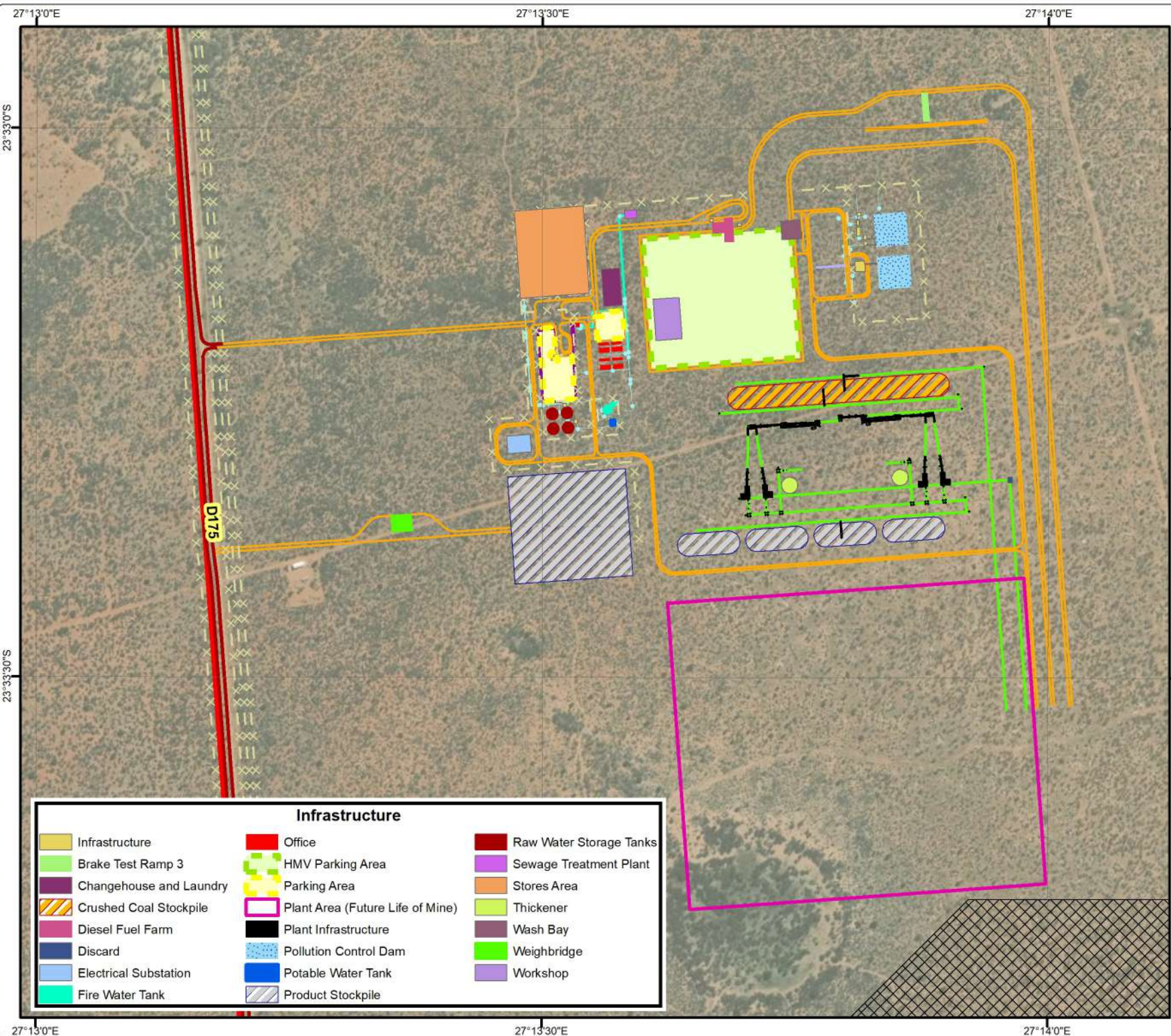
Legend

- Project Area
- Perennial Stream
- Parent Farm
- Infrastructure Layout**
- Access Road
- Trunk Access Road
- Conveyor
- Fence
- Pipeline
- Pollution Drain
- Sewer
- Walkway
- Plant
- Open Cast Pit (OC1)



Projection: Transverse Mercator
 Datum: WGS 1984
 Central Meridian: 27°E
 Date: 12/03/2020
 Ref #: UCD6170_SR_03_KR





Dalyshope Coal Mine

Infrastructure Layout

Legend

- Project Area
- Access Road
- Trunk Access Road
- Conveyor
- Fence
- Pipeline
- Pollution Drain
- Sewer
- Walkway
- Plant
- Open Cast Pit (OC1)

Infrastructure

- | | | |
|---|--|--|
| Infrastructure | Office | Raw Water Storage Tanks |
| Brake Test Ramp 3 | HMV Parking Area | Sewage Treatment Plant |
| Changehouse and Laundry | Parking Area | Stores Area |
| Crushed Coal Stockpile | Plant Area (Future Life of Mine) | Thickener |
| Diesel Fuel Farm | Plant Infrastructure | Wash Bay |
| Discard | Pollution Control Dam | Weighbridge |
| Electrical Substation | Potable Water Tank | Workshop |
| Fire Water Tank | Product Stockpile | |



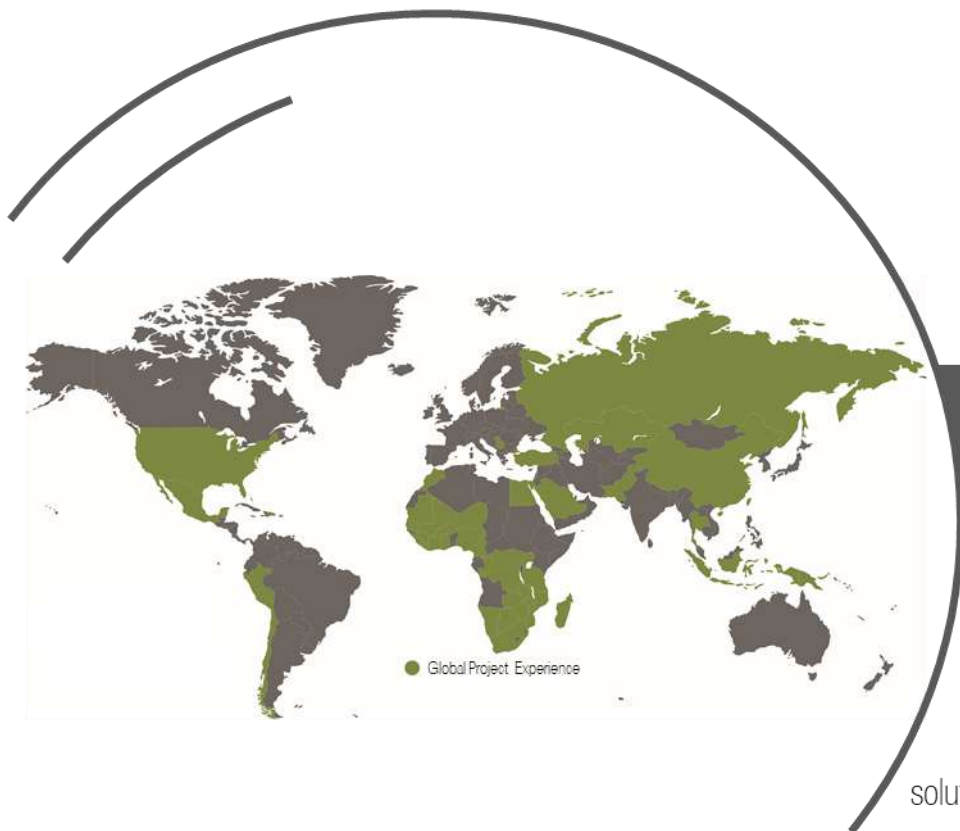
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 Datum: WGS 1984
 Central Meridian: 27°E
 Date: 05/03/2020
 Ref #: UCD6170_01_v3





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Appendix C: Public Participation Materials



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solutions throughout the resources sector

Environmental Regulatory Processes Required for the Proposed Dalyshope Coal Mining Project, Situated in the Magisterial District of Lephalale, Limpopo Province

Public Participation Report

Prepared for:

Universal Coal (Pty) Ltd

Project Number:

UCD6170

August 2020



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This document has been prepared by Digby Wells Environmental.

Report Type:	Public Participation Report
Project Name:	Environmental Regulatory Processes Required for the Proposed Dalyshope Coal Mining Project, Situated in the Magisterial District of Lephalale, Limpopo Province
Project Code:	UCD6170

Name	Responsibility	Signature	Date
Thembinkosi Zulu	Report Writer		August 2020
Janet Mkhabela	Reviewer		August 2020
Xanthe Taylor	Sign-off		August 2020

This report is provided solely for the purposes set out in it and may not, in whole or in part, be used for any other purpose without Digby Wells Environmental prior written consent.

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Appendix H: Proof of Stakeholders Consultation	
Appendix I: Announcement Letters	
Appendix J: Comments received and CRR	

1 Introduction

Anglo Operations Pty) Ltd (hereafter Anglo or the Applicant) has partnered with Universal Coal Development IV (Pty) Ltd (hereafter Universal) to participate in the proposed Dalyshope Coal Mining Project (the Project) through funding and managing the project development, including the Mining Right application. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resource and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and 30/5/1/1/2/ 10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal.

Universal, on behalf of Anglo, is applying for the following authorisations and licences, which are required prior to the commencement of mining operations:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA);
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);

The Project proposes to extract coal from Open Cast Pit 1 (OC1) (409.32 ha) through opencast mining using selective mining techniques. The proposed mining activities will only take place on the two farms; Farms Dalyshope 232 LQ and Klaarwater 231 LQ. All mining related infrastructure covers a surface area of approximately 47.33 ha (excluding linear infrastructure and OC1).

This report details the processes and activities which were undertaken as part of the Public Participation Process (PPP) as well as the methods of public consultation during the Scoping Phase.

1.1 Public Participation Process Objectives

The PPP objectives for the environmental-legal process are listed below:

- To ensure that Interested and Affected Parties (I&APs) are informed about the proposed project;
- To provide I&APs with opportunities to provide comment on the proposed project;
- To utilise local knowledge to identify environmental and social concerns associated with the proposed project;
- To involve I&APs in identifying methods in which concerns can be addressed;
- To provide I&APs with opportunities to verify that comments have been accurately recorded; and

- To comply with the legal requirements set out under NEMA.

1.2 Legal Framework

PPP is a legislative requirement in terms of Chapter 6 of the EIA regulations (As amended) in accordance with Section 24(5) and 44 of the NEMA.

2 Methodology

The method implemented for the PPP is in-line with the prescribed environmental regulatory legislation and set out in further detail below.

2.1 Scoping Phase

2.1.1 Identification of Stakeholders

To ensure adequate representation of stakeholders interested in or affected by the proposed project, the following steps were undertaken:

- Development of a local map showing the district and local municipal levels, ward levels and community clusters in the area;
- A review of existing stakeholder databases of project previous undertaken in the area;
- A map was also developed showing the different land parcels found within area in order to identify farm landowners. The information gathered was complemented by Windeed and internet searches to identify and verify land ownership and obtain contact details;
- A letter was submitted to the Office of the Regional Land Claims Commissioner: Limpopo, to enquire about land claims on the directly affected farm portions. The response from the Commission on Restitution of Land Rights was received on 14 February 2020 and 12 March 2020;
- Additional stakeholders were identified during the public consultations for the Social and Labour Plan (SLP) development process; and
- Internet searches to identify government officials and for the confirmation of their contact details.

Subsequently, additional stakeholders were identified after the public release of the Report through:

- Request to be registered as interest and affected parties (I&APs); and
- Telephonic and one-on-one consultations with landowners and land occupiers.

Stakeholders for the proposed project have been grouped into the following categories:

- **Government:** National, Provincial, District and Local authorities;
- **Landowners:** Directly affected and surrounding landowners;

- **Land occupiers:** Directly affected and surrounding land occupiers;
- **Communities:** Surrounding communities;
- **Non-Governmental Organisations (NGOs):** Environmental and social organisations;
- **Agriculture:** associations or organisations focused on agricultural activities; and
- **Business:** small and medium enterprises and formal organisations.

2.1.2 Public Participation Communication Channels

The legislative requirements indicate that specific materials and communication tools be utilised as part of the PPP. The following materials and communication methods were used to inform project stakeholders of the project:

- **Site Notices:** English site notices were put up at various places as indicated in Table 1. These site notices contained a brief project description, information about the required legislation, details of the appointed Environmental Assessment Practitioner (EAP), details on how to register as an Interested and Affected Party (I&AP), and the Land Tenure Map.
- **Background Information Documents (BID) with Comment and Registration Form:** a project description, geographic location of the project, legislative processes and requirements, triggered listed activities in terms of NEMA, the stakeholder engagement and registration processes as well as contact details of the Digby Wells Stakeholder Engagement Office. A Registration and Comment Sheet was also provided for stakeholders to use for formal registration as I&APs or to submit comments. The BID was also translated into the local predominant language which is Sepedi.
- **Announcement Letter:** A letter was sent in English which contained information about the proposed project, applicable legislation, details of the EAP, information about availability of the draft Scoping Report for public comment.

The various Public Participation materials and communications tools used during the Scoping phase have been included as Appendix A to Appendix J.

2.1.3 Stakeholder Consultation

As part of planning for face to face stakeholder consultations, Digby Wells submitted a Stakeholder Engagement Plan (SEP) as per the Covid-19 Regulations (GN R 650 of 5 June 2020) of the Department of Mineral Resources and Energy (DMRE). The SEP was accepted by the department on condition that public consultation comply with the Covid-19 regulations.

A Focus Group Meeting was held in Lesedi with select community members and Ward Committee Members on the 16th of July 2020. The FGM was held in Sepedi and BIDs in Sepedi were also distributed to all participants. Digby Wells left 100 Sepedi BIDs, registration and comment forms to the Ward Committee Members for their distribution to community members who were not in attendance of the meeting.

Using the locality map developed during stakeholder identification process, neighbouring landowners (immediately adjacent to the project site) were contacted and appointments were made to hold one-to-one meetings with them. These meetings were held on the 16th and 17th of July 2020.

2.1.3.1 Stakeholder Comments

All comments raised by stakeholders by completion of the comments sheet, email, WhatsApp, telephonically and from face-to-face meetings have been captured in the Comment and Response Report (CRR) (see Appendix J) and was closely considered and addressed, where applicable, these will be shared with the various specialists on the project for further consideration during the Impact Assessment phase. A summary of stakeholder comments is also listed on Appendix J.

2.1.3.2 Summary of Public Participation Activities during Scoping Phase

Table 1 details the activities undertaken during the Scoping Phase, together with referencing materials appended.

Table 1: Public Participation Scoping Phase Activities

Activity	Details	Reference in Report
Identification stakeholder database	Stakeholder database which represents government authorities, directly affected and adjacent landowners, as well as communities in and around the proposed project area.	Appendix A Stakeholder database
Land Claim Commission	A letter was sent to the Commission on Restitution of Land Rights to enquire if there are any land claims on the directly affected farm portions on 30 January 2020	Appendix B Land Claim Letters
Distribution of Background Information Document (BID)	English and Sepedi BID with a Registration and Comment Form were emailed and handed out to stakeholders on Monday 20 April 2020 and Wednesday 24 June 2020 .	Appendix D BID Registration and Comment Form
Distribution of Notification letter	A Notification letter was emailed to stakeholders on Monday 20 April 2020 and Wednesday, 24 June 2020 .	Appendix E Notification Letter
Placement of site notices	English site notices were put up at the proposed project site, a community centre, municipal offices and frequently visited shops on Tuesday, 25 February 2020 <i>A site notice placement map and report were also developed to indicate the various site notice locations</i>	Appendix F Site Notice



Activity	Details	Reference in Report
Stakeholder Engagement Plan	A Stakeholder Engagement Plan (SEP) was submitted to the Department of Mineral Resources and Energy (DMRE) prior to the commencement of the second Scoping Report release. This was accepted on 01 July 2020 by the Case Officer.	Appendix G Acceptance letter from DMRE.
Stakeholder Consultation	A Focus Group Meeting was held with the closest community to the project site in Lesedi at Lesedi Tshukudu Thusong Centre on 16 July 2020 . The meeting was attended by a combination of community members and Ward Committee Members.	Appendix H Proof of stakeholder consultation
	One-to-one meetings held with landowners at their respective residences on 16 and 17 July 2020.	
Announcement of Draft Scoping Report	Announcement of the availability of the Draft Scoping Report was emailed and SMS' were sent to stakeholders together with the formal project announcement letter on Monday 20 April 2020 and Wednesday, 24 June 2020 . The Draft Scoping Report was made available on http://view.datafree.co/PublicDocuments/ (under Public Documents). <i>Due to the COVID-19 national lock down, the Draft Scoping Report was released electronically via a data free resource.</i> <i>(30-day comment period for scoping report was 20 April 2020 until 20 May 2020 and 24 June 2020 until 24 July 2020)</i>	Appendix I Announcement Letters
Announcement of the Final Scoping Report	Final Scoping Report will be submitted to DMRE on 11 August 2020. A notification letter for availability of the Final Scoping Report will be emailed to all stakeholders on the database. The Final Scoping Report will also be made available on http://view.datafree.co/PublicDocuments/ under Public Documents.	
Obtaining comments from stakeholders	Comments, issues of concern and suggestions received from stakeholders have been captured in the Comment and Response Report.	Appendix J Comment and Response Report

3 Decision-making Process for the Scoping Phase

The documentation appended to this report provide all stakeholder material generated and distributed as part of the PPP for the prosed project. The detailed CRR as well as copies of all comments received have also been included in Appendix J to ensure transparency for informed decision-making by the DMR on the Application.

The DMR, as competent authority, will assess the Final Scoping Report and issue a decision stating whether not the process may continue. Should the Scoping Report be accepted by the DMR, the next phase of the environmental regulatory process is the EIA Phase. Further correspondence will be sent to all registered I&APs for the availability of the Draft EIA report and participation in this process in due course. As such, notifications to stakeholders will be done by means of a letter via email and SMS.



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Appendix A: Stakeholder Database

Category	Department/ Organisation	Name and Last Name	Position
National Government	Department of Environmental Affairs (DEA)	Nyiko Nkosi	Principal Environmental Officer
National Government	Department of Environmental Affairs (DEA)	Lucas Mahlangu	Control Environmental Officer
National Government	Department of Environmental Affairs (DEA)	Sabelo Malaza	Chief Directorate Integrated Environmental Authorisations
National Government	Department of Rural Development and Land Reform (DRDLR)	Harry Maphutha	Regional Land Claims Commissioner
National Government	Department of Rural Development and Land Reform (DRDLR)	Mduduzi Shabane	Information Officer
National Government	Department of Water Affairs and Sanitation (DWS)	Dakalo Rambuda	Environmental Officer
National Government	Department of Water Affairs and Sanitation (DWS)	Phillimon Khwinana	Control Environmental Officer
National Government	Department of Mineral Resources (DMR)	Portia Chawane	Environmental Officer
National Government	Department of Water Affairs and Sanitation (DWS)	Lerato Maibelo	
National Government	Department of Mineral Resources (DMR)	Andre Cronje	Chief Director
National Government	Department of Mineral Resources (DMR)	Patricia Gamede	DDG: Corporate Services
National Government	Department of Mineral Resources (DMR)	David Msiza	Chief Inspector of Mines
National Government	National Nuclear Regulator (NNR)	Elmond Lekota	Senior Specialist
National Government	National Nuclear Regulator (NNR)	Patle Mohajane	Session coordinator: Remediation
National Government	South African Heritage Resources Agency (SAHRA)	Phillip Hine	Manager: Archaeology, Palaeontology and Meteorites Unit
National Government	South African Heritage Resources Agency (SAHRA)	Phanuel Godfrey Tshivhalavhala	Heritage Officer

Category	Department/ Organisation	Name and Last Name	Position
Provincial Government	Limpopo Department of Economic Development, Environment and Tourism (LEDET)	Seema Harmse	Senior Manager
Provincial Government	Limpopo Department of Economic Development, Environment and Tourism (LEDET)	M. Nkosi	Chief Director:Environmental Trade & Protection
Provincial Government	Limpopo Department of Economic Development, Environment and Tourism (LEDET)	Victor Mongwe	EIA Approval
Provincial Government	Limpopo Department of Economic Development, Environment and Tourism (LEDET)	Solly Kgopong	HOD Support Services
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Pleasant Gavhi	SDC: Information and Records Management
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Tshilidzi Ratshisusu	
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Kenneth Maunye	
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Mpobonyane Rampora	
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Tele Maphoto	
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Lorraine Mosebedi	
Provincial Government	Department of Rural Development and Land Reform (DRDLR)	Semakaleng Mabeba	
Provincial Government	Limpopo Department of Water Affaires (DWA)	Kama Meso	
Provincial Government	Limpopo Department of Water Affaires (DWA)	Ben Sengani	
Provincial Government	Limpopo Department of Water Affaires (DWA)	Donald Mabanda	

Category	Department/ Organisation	Name and Last Name	Position
Provincial Government	Limpopo Department of Water Affairs (DWA)	Love Hlekane	Engineering Technician
Provincial Government	Limpopo Department of Water Affairs (DWA)	Mpho Mabuda	
Provincial Government	Limpopo Department of Water Affairs (DWA)	Malegodi Mahlatji	
Provincial Government	Limpopo Department of Water Affairs (DWA)	Marencia Mashilo	
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Aaron Kharivhe	
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Emily Mulaudzi	Regional Officer
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Tebogo Mangaba	
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Mapula Sathekge	
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Thulakanyo Tshishonga	
Provincial Government	Limpopo Department of Mineral Resources (DMR)	Nicholas Chavalala	
Provincial Government	Department of Health	Derrick Kganyago	Public Relations & Stakeholder Management:
Provincial Government	Limpopo Department of Agriculture and Rural Development	Jacqueline Maisele	
Provincial Government	Limpopo Department of Agriculture, Fisheries and Forestry	Foletji Mahlakoane	Department of Agriculture - Control Resource Auditor: Land use and soil management
Provincial Government	Limpopo Department of Agriculture, Fisheries and Forestry	Clement Mokgotho	Control Resource Auditor: Land use and Soil Management
Provincial Government	Department of Public Works	Jonathan Gafane	

Category	Department/ Organisation	Name and Last Name	Position
Provincial Government	Department of Public Works	Daisy Mafubelu	HOD Department of Agriculture
Provincial Government	Limpopo Department of Roads & Transport	Donald Lithole	
Provincial Government	Limpopo Heritage Resources Authority (LIHRA)	Sophia Matlou	
Provincial Government	Department of Water and Sanitation (DWS)	C.J Louw	
Provincial Government	Department of Water and Sanitation (DWS)	Maboea NP	
Provincial Government	Department of Water and Sanitation (DWS)	T Tshivhandekano	
Provincial Government	Provincial Heritage Resources Authority	Tebogo Molokomme	
Provincial Government	Provincial Heritage Resources Authority	Noluthando Cembi	
District Municipality	Waterberg	S Mafa	Environmental Manager
District Municipality	Waterberg	Eben Badernhost	Environmental Officer
District Municipality	Waterberg	Leonard Sole	LED Officer
District Municipality	Waterberg	Mpheta Mabotja	Municipal Manager
District Municipality	Waterberg	Reuben Mashego	Environmental Manager
District Municipality	Waterberg	Betty Molekwa	LED Manager
District Municipality	Waterberg	Lindiwe Kgomo	IPD Manager
District Municipality	Waterberg	Cllr Lesetja Gwangwa	Mayor
District Municipality	Waterberg	Moatshe	Planning and Economic Development
District Municipality	Waterberg	M Mathunyane	Infrastructure Development
District Municipality	Waterberg	E Kelly	Municipal Manager
Local Municipality	Lephalale	Maria Cocquyt	Acting Municipal Manager
Local Municipality	Lephalale	Charles Seanago	LED Manager
Local Municipality	Lephalale	Charity Radipabe	Executive Manager
Local Municipality	Lephalale	Steven Mtileni	IS

Category	Department/ Organisation	Name and Last Name	Position
Local Municipality	Lephalale	Frans Mabotja	IDP Manager
Local Municipality	Lephalale	Victor Monyepao	Public Participation
Local Municipality	Lephalale	April Shiko	Manager:Water Services
Local Municipality	Lephalale	Hezekiel Mchambili	Ward 3 Committee Secretary
Local Municipality	Lephalale	France Magwai	Former Ward 3 Councillor
Local Municipality	Lephalale	Gerben Makgamatha	Executive Manager
Local Municipality	Lephalale	Ditlhokua Matsoma	EMC
Local Municipality	Lephalale	Joshua Hlapa	Waste & Environmental Manager
Local Municipality	Lephalale	Walter Rachidi	Divisional Head: Env.Landuse
Local Municipality	Lephalale	Sophonias Petja	Librarian
Local Municipality	Lephalale	Paulina Mampa	Assistant Librarian
Community	Lesedi	Ramokane Moatshe	Ward Councillor
Community	Lesedi	Johanna Ndoweni	Library
Community	Lesedi	Nico Pienaar	Councillor Ward 4
Community	Lesedi	Sophia Matlou	Committee Member Ward 4
Community	Lesedi	Rosinah Magoqi	Committee Member Ward 4
Community	Lesedi	Noah Magoai	Committee Member Ward 4
Community	Lesedi	Louisa Mashabane	Committee Member Ward 4
Community	Lesedi	Tsholofelo Motshegoa	Committee Member Ward 4
Community	Lesedi	Laezen Molefe	Committee Member Ward 4
Community	Lesedi	Alfred Magwai	Committee Member Ward 4
Community	Lesedi	Mamapula Magcai	Committee Member Ward 3
Community	Lesedi	Mmama Tlaka	Committee Member Ward 3
Community	Lesedi	John	Committee Member Ward 3
Community	Lesedi	Godfrey Ratihosa	Committee Member Ward 3
Community	Lesedi	Gothi	Committee Member Ward 3
Community	Lesedi	Lazarus	Committee Member Ward 3
Community	Lesedi	Mpho Mochambi	Committee Member Ward 3
Community	Lesedi	William Magowe	Committee Member Ward 3
Community	Lesedi	Jeremiah Nkoali	Committee Member Ward 3
Community	Lesedi	Choki Magwai	Committee Member Ward 3
Community	Lesedi	Stephens Malaphola	Committee Member Ward 3

Category	Department/ Organisation	Name and Last Name	Position
Community	Lesedi	Joseph Nkwali	Committee Member Ward 3
Community	Lesedi	Ditiro Majapholo	Community Rights Defender
Environmental NGO's	Birdlife South Africa	Nathan Philander	
Environmental NGO's	Birdlife South Africa	Pamela Barrett	CEO PA & Secretary
Environmental NGO's	Center for Environmental Rights NPC	Nicole Loser	
Environmental NGO's	Centre for Environmental Rights NPC	Robyn Hugo	
Environmental NGO's	Centre for Environmental Rights NPC	Teboho Sebogodi	Candidate Attorney
Environmental NGO's	Centre for Environmental Rights NPC	Sylvia Kamanja	
Environmental NGO's	Centre for Environmental Rights NPC	Makoma Lekalakala	Senior Programmes Officer
Environmental NGO's	Earthlife Africa	Dominique Doyle	
Environmental NGO's	Earthlife Africa	Tristan Taylor	
Environmental NGO's	Endangered wildlife Trust (EWT)	Adam Pires	Programme Manager
Environmental NGO's	Endangered wildlife Trust (EWT)	Bradley Gibbons	Field Officer
Environmental NGO's	Endangered Wildlife Trust (EWT)	Ashleigh Dore	Training Coordinator
Environmental NGO's	Endangered Wildlife Trust (EWT)	Wendy Collinson	Field Officer
Environmental NGO's	Groundworks	Bobby Peek	Climate & Environmental Justice
Environmental NGO's	Lawyers for Human Rights	Kayan Leung	Candidate attorney
Environmental NGO's	Lowveld Bird Club	Karen Bullen	Lowveld Chairperson
Environmental NGO's	Rock Art Research Institute	David Pearce	Director
Environmental NGO's	Wildlife and Environment Society of South Africa (WESSA)	Lemson Betha	Project Manager
Environmental NGO's	Water Research Commission	Adriaan Taljaard	Marketing and Communications Manager
Environmental NGO's	Mogol Farmers Association	Theuns Pretorius	
Environmental NGO's	TCTA	Nelwamondo Azwianewi	
Environmental NGOs	Waterberg Environmental Justice Forum (WEJF)	Francina Nkosi	
Environmental NGOs	Working for Wetlands	Lebogang Ralepeli	
Environmental NGOs	Federation for a Sustainable Environment	Mariette Liefferink	
Environmental NGOs	Realsearch Environmental Management and Development	Basson Chris	

Category	Department/ Organisation	Name and Last Name	Position
Environmental NGOs	Steenbokpan Development Consortium	Maritz Chris	
Environmental NGOs	Lajuma Environmental Research Centre	Gaigher Ian	
Environmental NGOs	Regional Advisory Environmental Forum	Hunt Arthur	
Environmental NGOs	Wildlife and Environment Society of South Africa (WESSA)	Perkins Luke	
Agricultural Union	Agri SA - Lephalale	Francios van der Berg	
Agricultural Union	Agri South Africa- Witbank Farmers Association	Gert Smith	
Agricultural Union	Northern Transvaal Agricultural Union (NTLU)	Wilma Prinsloo	
Agricultural Union	Northern Transvaal Agricultural Union (NTLU)	J Swanevelder	
Agricultural Union	Transvaal Agricultural Union S.A (TLUSA)	Gert Snyman	
Agricultural Union	Steenbokpan Boere Unie	Thinus Steenkamp	
Farmers Association	Mogol Farmers Association	S C Pelser	
Business and commerce		Dries De Ridder	
Business and commerce	Eskom	Andile Bala	
Business and commerce	Eskom	Prudence Khosa	
Business and commerce	Eskom	Rosetta Rammutla	
Business and commerce	Lategan Viljoen Pretorius Attorneys	Kobus De Villiers	
Business and commerce	Lategan Viljoen Pretorius Attorneys	Retha Maritz	
Business and commerce	Limpopo Development Agency	Freddy Chaba	
Business and commerce	PWC	Hein Boegman	
Business and commerce	Sunfox 7 CC	Ellert Michael Wemer	
Business and commerce	Taaiboschpan Landgoed CC.	Jan Talma	
Business and commerce	Taaiboschpan Landgoed CC.	Oberh Olzer Judex	
Business and commerce	Transnet Freight Rail	Phindile Mnguni	
Business and commerce	Transnet Freight Rail	Francis Rahlapane	

Category	Department/ Organisation	Name and Last Name	Position
Business and commerce	Gunn Attorneys	Gunn Adam	
Business and commerce	Gunn Attorneys	Alexa Rae-Sebaba	
Business and commerce	Zeekoeivley Hunting Safaris CC	Andre Uys	
Business and commerce	Zinyathi Lodge cc	Le Grange Hannes	
Business and commerce	Zitshunele Trading & Contracting	Jantjie Iki	
Business and commerce	Chamber of Business	Stephanie Mudau	
Business and commerce	Eskom Park (Eskom Holdings)	Xander Neethling	
Business and commerce	Eskom Park (Eskom Holdings)	Michael Mike Taffa	
Business and commerce	Servitudewatch	Bema Enslin	
Business and commerce, Indirectly Affected Landowners	Eskom Transmission Land and Rights	Tobile Bokwe	
Business and commerce, Indirectly Affected Landowners, Landowner	Transnet	Phillip de Klerk	
Industry and Commerce	Eskom	Gert Basson	
Industry and Commerce	Target Cranes	P.J Barkhuizen	
Industry and Commerce	Telkom SA Ltd	Charles Hart	
Industry and Commerce	Cvil & Power Generation Project (Pty) Ltd	John Geeringh	
Industry and mining	Eskom GC: Land Development	Filomaine Swanepoel	
Industry and mining	Exxaro Resources	John Schoeman	
Industry and mining	Temo Coal Mining	Dorothy Kgathi-thite	
Industry and mining	Sekoko Mining	Rebecca Mafura	
Industry and mining	Sasol Mining (Pty) Ltd	Portia Khumalo	
Library	Lephalale Local Municipality	Sophonias Petja	
Library	Marapong Public Library	Thulare	
Media	Mogol Pos Newspaper	Jaques Du Plessis	
Directly Affected Landowner	Nazrov 685 LQ	Mr & Mrs Visnakova	
Directly Affected Landowner	Sasol Mafutha Mining (Pty) Ltd	Flip Nel	

Category	Department/ Organisation	Name and Last Name	Position
	Kanivest 3067 CC	S D Counih	
Directly Affected Landowner	Pentonville 216	Piet Nel	
Directly Affected Landowner	Verloren Valey 246	Nico Swanepoel	
Directly Affected Landowner	Anglo Operations Pty (Ltd)	Jan Oberholzer	
Directly Affected Landowner	Gruisfontein 230	Hein Schönfeldt	
Directly Affected Landowner	Anglo Operations Pty (Ltd)	Ken du Plessis	
Directly Affected Landowner	Draaiom (244)	Piet Nel	
Indirectly Affected Landowners	Resgen South Africa (Pty) Ltd	Lerato Ratsoenyane	
Indirectly Affected Landowners	Carolina 217	Swanevelder Cornelia Jacoba	
Indirectly Affected Landowners	Duikerpan 249	Piet-Nel de Vos	
Indirectly Affected Landowners	Groenfontein 250	Danie Steenkamp	
Indirectly Affected Landowners	Tikvah Accomodation	Steenkamp Daniel Hermanus	
Indirectly Affected Landowners	(LVP Attorneys)"	G.A Steenkamp & Kobus de Villiers	
Botswana I&Aps	Basinghall 31 LQ	Wimpy Biemond	
Botswana I&Aps	Holmlea 30 LQ	Mr Seleka Mokama	
Landowner		Heinrich Wedon Schonfeldt	
Landowner		Lindi Nell	
Landowner		Regina H	
Landowner		Wim Moritz Biemond	
Landowner	Farm Basinghall 31 LQ	Fred Welpton	

Category	Department/ Organisation	Name and Last Name	Position
Landowner	Farm Craignair 9 LP	Kevin Nell	
Landowner	Darnaway, Dovedale33LQ, Riverslee 32 LQ	Kallie Cornelius (Occupier)	
Landowner	Farm Groenfontein 250 Portion 2	Michiel Venter (Occupier)	
Landowner	Groote-Zwart-Bult 29 Portion R/E/ Sasol Mafutha Mining (Pty) Ltd	Seleka Mokama	
Landowner	Keward	K Barward	
Landowner	Kupa Chambish Mining	C Barward	
Landowner	Kupa Chambish Mining	Sauer Johannes Jacobus	
Landowner	Relative to Tjaard Sauer	Derek Brink	
Landowner	Riversdale	Christine Sydes	
Landowner	Riversley Portion 1(NE)	A Swart	
Landowner	Steenbokpan Handedlaars	Marie Helm	
Landowner	Streekbestuurder TLUSA Noord	Harmse Gerhardus Marthinus	
Landowner	Theunispans 293 LQ	Phillip Nel	
Landowner	Vlakfontein 264 Portion R/E	James O'Reilly	
Landowner	Woodlands 23 LQ	Paulina Mampa	
Client	Universal Coal	Minah Moabi	
Client	Universal Coal	Redwin Tshisudzungwane	
Consultant	Digby Wells	Xanthe Taylor	
Landowner Attorney	Dewald de Beer (Verloren Valey)	Dewald Pretorius Le Roux	
Community Member	Phuduhudu Environment and Community Activists	Ditiro Jan Majapholo	



DIGBY WELLS
ENVIRONMENTAL

Appendix B: Land Claim Letters



12 February 2020

Internal Project no: UCD6071

Mr Tele Maphoto

Limpopo Department of Rural Development and Land Reform

Land Claims Commission

61 Biccard Street

Polokwane

0700

tele.maphoto@drdlr.gov.za

UNIVERSAL COAL PLC

LAND CLAIMS ENQUIRY: DALYSHOPE MINING RIGHT APPLICATION AND ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED COAL MINING PROJECT NEAR STEENBOKPAN, LIMPOPO PROVINCE

Dear Mr Maphoto

Background Information

Digby Wells Environmental has been requested by Universal Coal (Pty) Ltd to facilitate and complete the environmental and legal applications for Authorisations required to develop and operate the proposed mine near Steenbokpan in Lephalale Local Municipality, Limpopo.

Universal intend to apply for a Mining Right in terms of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA). Concurrently, a Scoping and Environmental Impact Assessment (EIA) process in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), and the National Environmental Management: Waste Act, 2008 (Act No. 56 of 2008) (NEM:WA) will be undertaken as part of the environmental-legal process for the proposed open pit mining.

Information pertaining to the land enquiry

As part of the environmental regulatory process, Digby Wells would like to enquire if there are any land claims on the following farms:

Table-1: Directly affected farms

Farm Boundary	Farm Portion	Registration Division	District Municipality
Koertolouwzyn pan 234	234	T0LQ00000000023400000	Waterberg District Municipality
Nazarov 685	685	T0LQ00000000068500000	Waterberg District Municipality
Matopi 705	705	T0LQ00000000070500000	Waterberg District Municipality
Pentonville 216	216	T0LQ00000000021600000	Waterberg District Municipality
Hardekraaltje 212	212	T0LQ00000000021200000	Waterberg District Municipality
Verloren Valey 246	246	T0LQ00000000024600000	Waterberg District Municipality
Dartmoor 213	213	T0LQ00000000021300000	Waterberg District Municipality
Gruisfontein 230	230	T0LQ00000000023000000	Waterberg District Municipality
Dalyshope 232	RE/232	T0LQ00000000023200000	Waterberg District Municipality
Groenfontein 250	RE/250	T0LQ00000000025000000	Waterberg District Municipality
Canada 229	RE/229	T0LQ00000000022900000	Waterberg District Municipality
Welgelen 228	228	T0LQ00000000022800000	Waterberg District Municipality
Klaarwater 231	RE/231	T0LQ00000000023100000	Waterberg District Municipality
Wynberg 215	215	T0LQ00000000021500000	Waterberg District Municipality


Table 2: Indirectly affected farms

Farm Boundary	Farm Portion	Registration Division	District Municipality
Draaiom 244	244	T0LQ00000000024400000	Waterberg District Municipality
Swelpan 245	245	T0LQ00000000024500000	Waterberg District Municipality
Surrey 18	18	T0LQ00000000018000000	Waterberg District Municipality
Carolina 217	217	T0LQ00000000021700000	Waterberg District Municipality
Hans 713	713	T0LQ00000000071300000	Waterberg District Municipality
Grootwater 218	218	T0LQ00000000021800000	Waterberg District Municipality
Japie 714	714	T0LQ00000000071400000	Waterberg District Municipality
Sussex 17	17	T0LQ00000000017000000	Waterberg District Municipality
Duikerpan 249	RE/249	T0LQ00000000024900000	Waterberg District Municipality

Farm Boundary	Farm Portion	Registration Division	District Municipality
Groenfontein 250	2/250	T0LQ0000000025000002	Waterberg District Municipality
Doornkopje 235	1/235	T0LQ0000000023500001	Waterberg District Municipality
Witkopje 238	RE/238	T0LQ0000000023800000	Waterberg District Municipality
Doornkopje 235	RE/235	T0LQ0000000023500000	Waterberg District Municipality
Kleinberg 250	1/252	T0LQ0000000025200001	Waterberg District Municipality
Nieuw Holland 247	247	T0LQ0000000024700000	Waterberg District Municipality

Should you require additional information please do not hesitate to contact Ms. Janet Mkhabela.

Regards,



Janet Mkhabela

Stakeholder Engagement Consultant

Stakeholder Engagement Office

Digby Wells Environmental

Tel: (011) 789 9495 or Fax: 011 069 6801

Email: janet.mkhabela@digbywells.com or sh@digbywells.com

Postal Address: Private Bag X 10046,

Randburg, 2125



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: LIMPOPO
61 Biotard Street/96 Kagiso House Cnr Risaik and Schoeman, Polokwane, 0700
Private Bag X9552, Polokwane, 0700
Tel (015) 284 6300/287 2600 Fax No (015) 295 7404/7403

Enq: Rampora Oldoria
Our Ref: 12/R

Digby Wells Environmental
Private Bag X 10046
Randburg
2125

Attention: Janet Mkhabela
Email: janet.mkhabela@dibywells.com

LAND CLAIMS ENQUIRY – JAPIE 714 LQ, SUSSEX 17 LQ, R/E OF WITKOPJE 238 LQ & NIEUW HOLLAND 247 LQ

We refer to your letter dated **12 February 2020**.

We confirm that as at the date of this letter no land claim appear on our database in respect of the Properties. This includes the database for claims lodged by 31 December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have lodged but not yet been gazetted such as:

1. Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description; and
2. Some Claimants provided the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights in land against.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property.

If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do a further search.

Yours faithfully


Mr. S S MABEBA
DIRECTOR QUALITY ASSURANCE AND ADMINISTRATION

DATE: 10/03/2020



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: LIMPOPO
61 Biccard Street/96 Kagiso House Cnr Rissik and Schoeman, Polokwane, 0700
Private Bag X9552, Polokwane, 0700
Tel: (015) 284 6300/287 2600 Fax No: (015) 295 7404/7403

Enq: Rampora Oldoria
Our Ref: R/12 – R/5/124/474155469

Digby Wells Environmental
Private Bag X 10046
Randburg
2125

Attention: Janet Mkhabela
Email: janet.mkhabela@dibywells.com

**LAND CLAIMS ENQUIRY – REMAINING EXTENT OF DUIKERPAN 249 LQ,
PORTION 2 OF GROENFONTEIN 250 LQ, PORTION 1 OF DOORNKOPJE 235
LQ & PORTION OF KLEINBERG 250 LQ**

We refer to your letter dated 12 February 2020.

We confirm that there are existing land claims against the Properties. The claims were lodged by Motlhabatse Community with Ref: R/5/124/474/155469 on the 10/06/2016 on the farm R/E of Duikerpan 249 LQ, LP Motshehoa with Ref: R/5/124/467/158232 on the 24/06/2016, KA Khoza with Ref: R/5/124/467/158136 on the 24/06/2016 & AP Morulane with Ref: R/5/124/463/147049 on the 05/05/2016 on Ptn 2 of Groenfontein 250 LQ, JJ Molimisi with Ref: R/5/124/463/147648 on the 06/05/2016 on Ptn 1 of Doornkopje 235 LQ & BG Ramakomoto with Ref: R/5/124/463/150693 on the 19/05/2016 on Ptn 1 of Kleinberg 250 LQ

The claims were lodged in terms of the Restitution of Land Rights Amendment Act, 2014 (Act No 15 of 2014) ("the Amendment Act") which, amongst others, reopened the lodgement of claims for a period of five years.

The validity of the Amendment Act was challenged in the Constitutional Court. The Constitutional Court found the Amendment Act to be invalid because of the failure of Parliament to facilitate public involvement as required by the Constitution. The Amendment Act ceased to be law on 28 July 2016.

The Constitutional Court ordered that the claims that were lodged between 1 July 2014 and 27 July 2016 are validly lodged, but it interdicted the Commission from processing those claims until the Commission has finalised the claims lodged by 31 December 1998 or until Parliament passes a new law providing for the re-opening of lodgement of land claims.

The Commission will therefore not be processing the above claim until it finishes claims lodged by 31 December 1998 or until Parliament passes a new law providing for re-opening of lodgement of claims.

It is important to note that the provisions of section 11 (7) of the Restitution of Land Rights Act, 1994 do not apply until after the Commission has accepted the claim for investigation and published its details in the Government Gazette. That will only be done on the happening of either event in the previous paragraph.

Yours faithfully



Mr. S S MABEBA

DIRECTOR QUALITY ASSURANCE AND ADMINISTRATION

DATE: 10/03/2020



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: LIMPOPO
61 Biccard Street/96 Kagiso House Cor. Rissik and Schoeman, Polokwane, 0700
Private Bag X9552, Polokwane, 0700
Tel: (015) 264 6300/287 2600 Fax No: (015) 295 7404/7403

Enq: Ratshisusu TU
Our Ref: 12/R-R/5/124/463/147049

**DIGBY WELLS ENVIRONMENTAL
PRIVATE BAG X10046
RANDBURG
2125**

Email: sh@digbywells.com or janet.mkhabela@digbywells.com

Attention: Mr / Ms Janet Mkhabela

Dear Sir / Madam

LAND CLAIMS ENQUIRY – RE OF GROENFONTIEN 250 LQ

We refer to your letter dated 12 February 2020.

We confirm that there are existing land claims against the Property. The claims were lodged by Morulane AP with ref: R/5/124/463/147049 on 05-05-2016 and others.

The claims were lodged in terms of the Restitution of Land Rights Amendment Act, 2014 (Act No 15 of 2014) ("the Amendment Act") which, amongst others, reopened the lodgement of claims for a period of five years.

The validity of the Amendment Act was challenged in the Constitutional Court. The Constitutional Court found the Amendment Act to be invalid because of the failure of Parliament to facilitate public involvement as required by the Constitution. The Amendment Act ceased to be law on 28 July 2016.

The Constitutional Court ordered that the claims that were lodged between 1 July 2014 and 27 July 2016 are validly lodged, but it interdicted the Commission from processing those claims until the Commission has finalised the claims lodged by 31 December 1998 or until Parliament passes a new law providing for the re-opening of lodgement of land claims. Parliament was given until 27 July 2018 to pass such a law.

The Commission will therefore not be processing the above claim until it finishes claims lodged by 31 December 1998 or until Parliament passes a new law providing for re-opening of lodgement of claims.

It is important to note that the provisions of section 11 (7) of the Restitution of Land Rights Act, 1994 do not apply until after the Commission has accepted the claim for investigation and published its details in the Government Gazette. That will only be done on the happening of either event in the previous paragraph.

Yours faithfully



Mr. S S MABEBA

DIRECTOR QUALITY ASSURANCE AND ADMINISTRATION

DATE: 14/02/2020.



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: LIMPOPO
61 Biccard Street/96 Kagiso House Cnr. Rissik and Schoeman, Polokwane, 0700
Private Bag X9552, Polokwane, 0700
Tel: (015) 284 6300/287 2600 Fax No: (015) 295 7404/7403

Enq: Ratshisusu TU
Our Ref: 12/R-R/5/124/463/148093

**DIGBY WELLS ENVIRONMENTAL
PRIVATE BAG X10046
RANDBURG
2125**

Email: sh@digbywells.com or janet.mkhabela@digbywells.com

Attention: Mr / Ms Janet Mkhabela

Dear Sir / Madam

LAND CLAIMS ENQUIRY – HARDEKRAALTJE 212 LQ

We refer to your letter dated 12 February 2020.

We confirm that there is an existing land claim against the Property. The claim was lodged by Motiane B with ref: R/5/124/463/148093 on 10-05-2016

The claim was lodged in terms of the Restitution of Land Rights Amendment Act, 2014 (Act No 15 of 2014) ("the Amendment Act") which, amongst others, reopened the lodgement of claims for a period of five years.

The validity of the Amendment Act was challenged in the Constitutional Court. The Constitutional Court found the Amendment Act to be invalid because of the failure of Parliament to facilitate public involvement as required by the Constitution. The Amendment Act ceased to be law on 28 July 2016.

The Constitutional Court ordered that the claims that were lodged between 1 July 2014 and 27 July 2016 are validly lodged, but it interdicted the Commission from processing those claims until the Commission has finalised the claims lodged by 31 December 1998 or until Parliament passes a new law providing for the re-opening of lodgement of land claims. Parliament was given until 27 July 2018 to pass such a law.

The Commission will therefore not be processing the above claim until it finishes claims lodged by 31 December 1998 or until Parliament passes a new law providing for re-opening of lodgement of claims.

It is important to note that the provisions of section 11 (7) of the Restitution of Land Rights Act, 1994 do not apply until after the Commission has accepted the claim for investigation and published its details in the Government Gazette. That will only be done on the happening of either event in the previous paragraph.

Yours faithfully

S S Mabeba

Mr. S S MABEBA

DIRECTOR QUALITY ASSURANCE AND ADMINISTRATION

DATE: 14/02/2020



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: LIMPOPO
61 Biccard Street/96 Kagiso House Cnr. Rissik and Schoeman, Polokwane, 0700
Private Bag X9552, Polokwane, 0700
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Enq: Ratshisusu TU
Our Ref: 12/R

**DIGBY WELLS ENVIRONMENTAL
PRIVATE BAG X10046
RANDBURG
2125**

Email: sh@digbywells.com or janet.mkhabela@digbywells.com

Attention: **Mr / Ms Janet Mkhabela**

Dear Sir / Madam

**LAND CLAIMS ENQUIRY – KOERTOLOUWZYN PAN 234 LQ, NAZAROV 685 LQ,
MATOPI 705 LQ, PENTONVILLE 216 LQ, VERLOREN VALEY 246 LQ,
DARTMOOR 213 LQ, GRUISFONTEIN 230 LQ, AND RE OF DALYSHOPE 232 LQ**

We refer to your letter dated 12 February 2020.

We confirm that as at the date of this letter no land claims appear on our database in respect of the property. This includes the database for claims lodged by 31 December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.

Whilst the Commission takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commission's control, particularly relating to claims that have been lodged but not yet been researched such as:

1. Some claimants referred to properties they claim dispossession of rights in land using historical property descriptions which may not match the current property description; and
2. Some claimants provided the geographic descriptions of the land they claim without mentioning the actual property description they claim dispossession of rights in land.

The Commission therefore does not accept any liability whatsoever if through the process of further investigation of claims it is found that there is in fact a land claim in respect of the above property.

If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do a further search.

Yours faithfully



Mr. S S MABEBA

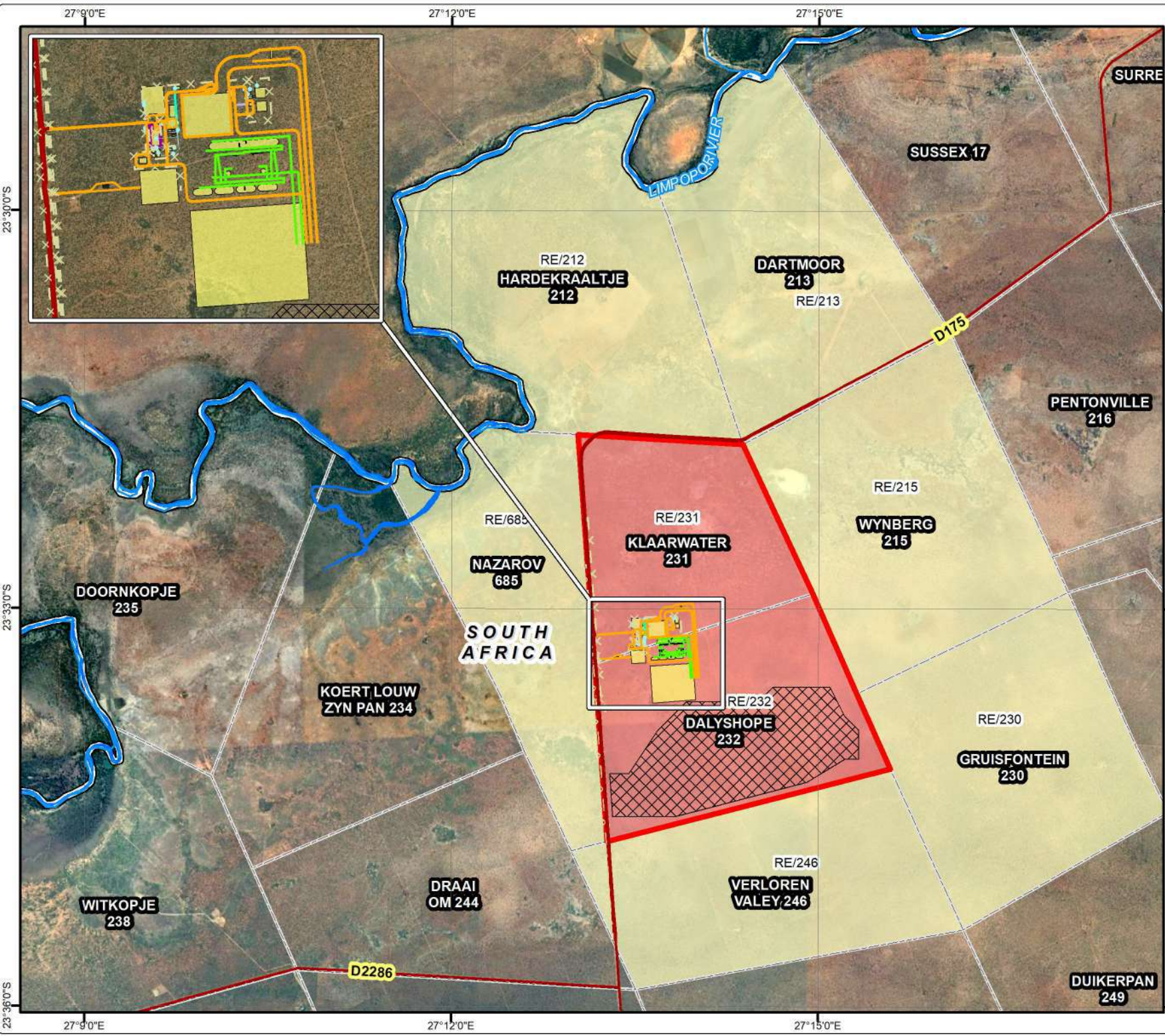
DIRECTOR QUALITY ASSURANCE AND ADMINISTRATION

DATE: 17/02/2020



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Appendix C: Land Tenure Map



Dalyshope Coal Mine

Land Tenure

Legend

- Project Area
- Main Road
- Perennial Stream
- International Boundary
- Land Tenure**
- Directly Affected
- Indirectly Affected
- Parent Farm
- Infrastructure Layout**
- Access Road
- Trunk Access Road
- Conveyor
- Fence
- Pipeline
- Pollution Drain
- Sewer
- Walkway
- Plant
- Infrastructure
- Open Cast Pit (OC1)

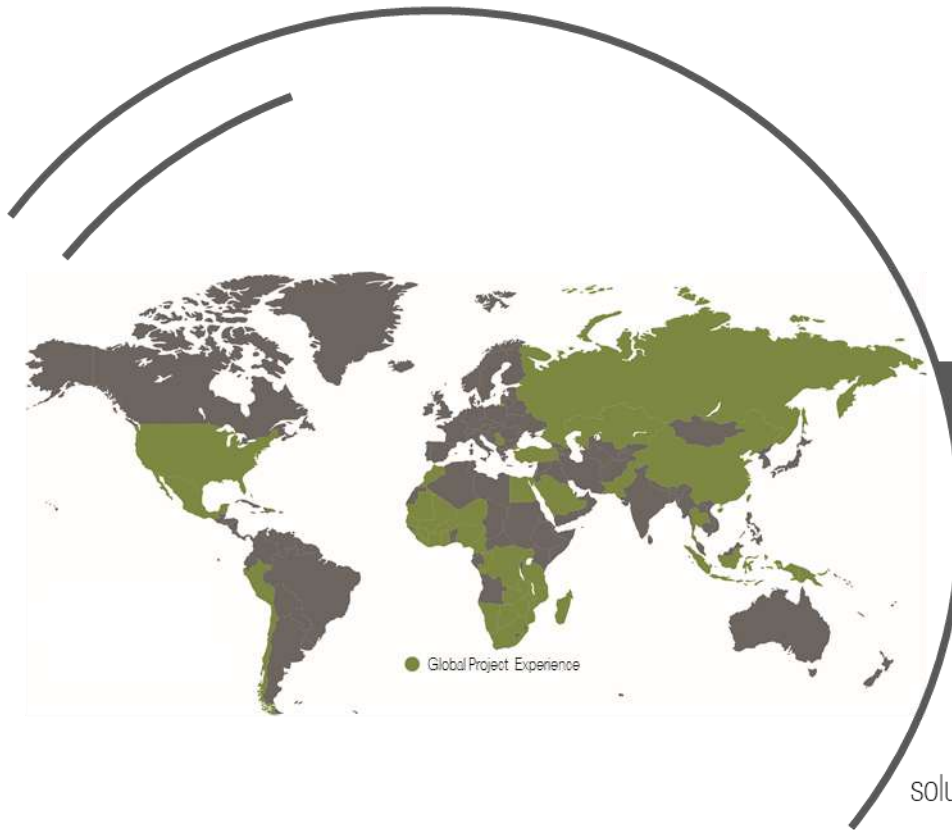


Projection: Transverse Mercator
 Datum: WGS 1984
 Central Meridian: 27°E
 Date: 12/03/2020
 Ref #: UCD6170_SR_01_KR





Appendix D: BID & Registration and Comment Form



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ENVIRONMENTAL REGULATORY PROCESS REQUIRED FOR THE PROPOSED DALYSHOPE COAL MINING PROJECT NEAR STEENBOKPAN, LIMPOPO PROVINCE.

Background Information Document

Prepared for:

Universal Coal (Pty) Ltd

Project Number:

UCD6170

17 April 2020

**TO REGISTER AND FOR MORE INFORMATION PLEASE USE THE FOLLOWING CONTACT
INFORMATION**

Ms. Janet Mkhabela/ or Ms. Thembinkosi Zulu

Digby Wells Environmental (Pty) Ltd.

PO Box 10046, Randburg, 2125

Tel: (011) 789 9495

Fax: (011) 789 9498 / (011) 069 6801

Email: sh@digbywells.com

Website: www.digbywells.com

1 Purpose of this Document

The purpose of this document is to provide all Interested and Affected Parties (I&APs) with information relating to the proposed Environmental Regulatory Process Required for The Proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province. This document aims to:

- Provide a description of the proposed Project;
- Provide an overview of the required regulatory processes;
- Provide details in terms of the regulated Public Participation Process (PPP); and
- Invite all I&APs to register as stakeholders, provide comment, raise issues or concerns, and provide suggestions for the enhanced benefit of the Project.

2 Introduction to the Project & Project Location

Anglo Operations Pty) Ltd (hereafter Anglo or the Applicant) has partnered with Universal Coal Development IV (Pty) Ltd (hereafter Universal) to participate in the proposed Dalyshope Coal Mining Project (the Project) through funding and managing the project development, including the Mining Right Application. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resource and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and 30/5/1/1/2/ 10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal.

Universal will therefore be managing the Project application processes, however, Anglo will remain the Applicant.

Figure 2-1 below shows the extent of the proposed Mining Right Area, but the mining activities (highlighted in pink) is where the proposed Dalyshope Coal Mine will be situated. Figure 2-2 shows the farms associated with the proposed Dalyshope Coal mine and the proposed placement of the mining and mining-related infrastructure.

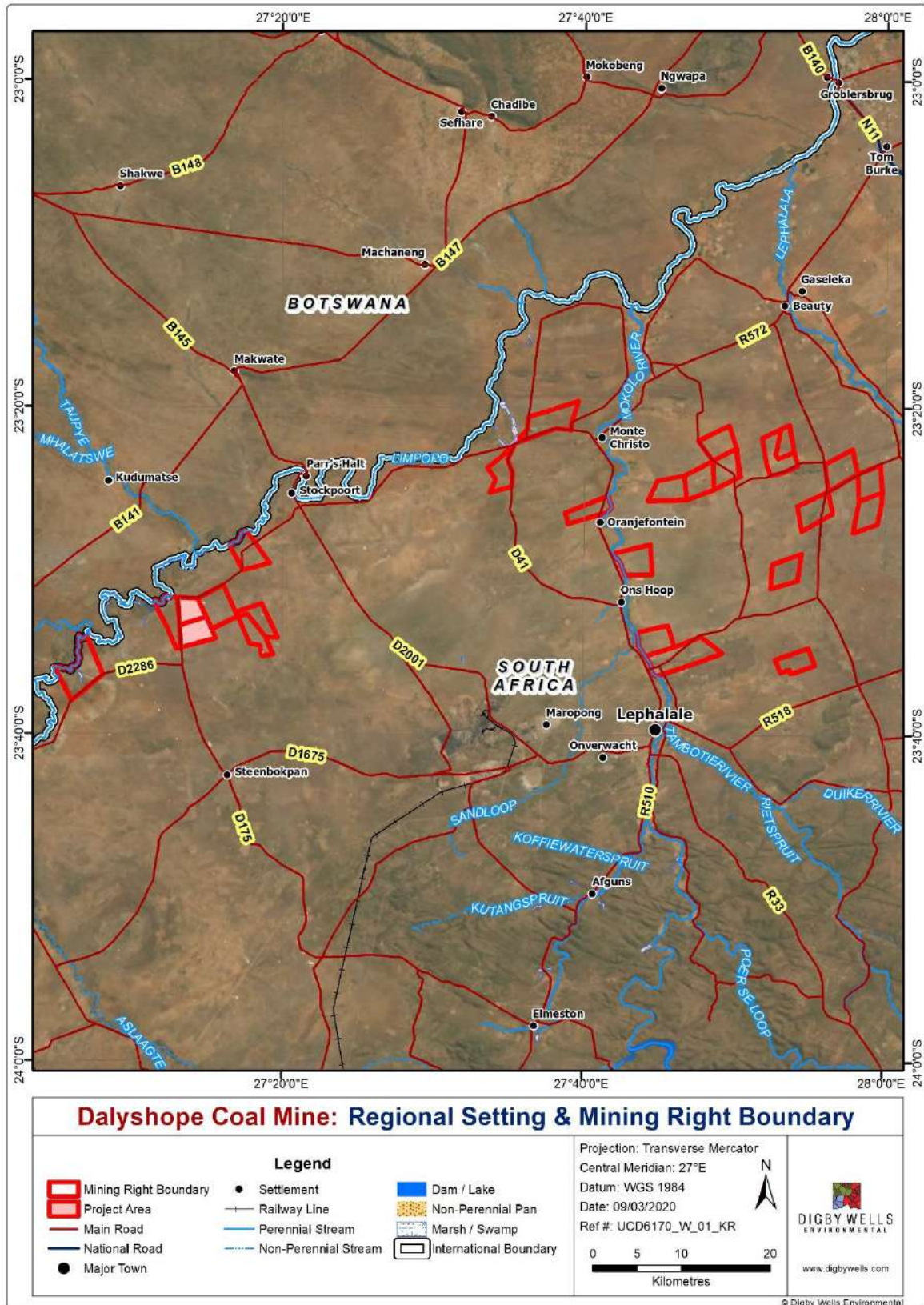


Figure 2-1: Regional Map and Mining Right Boundary

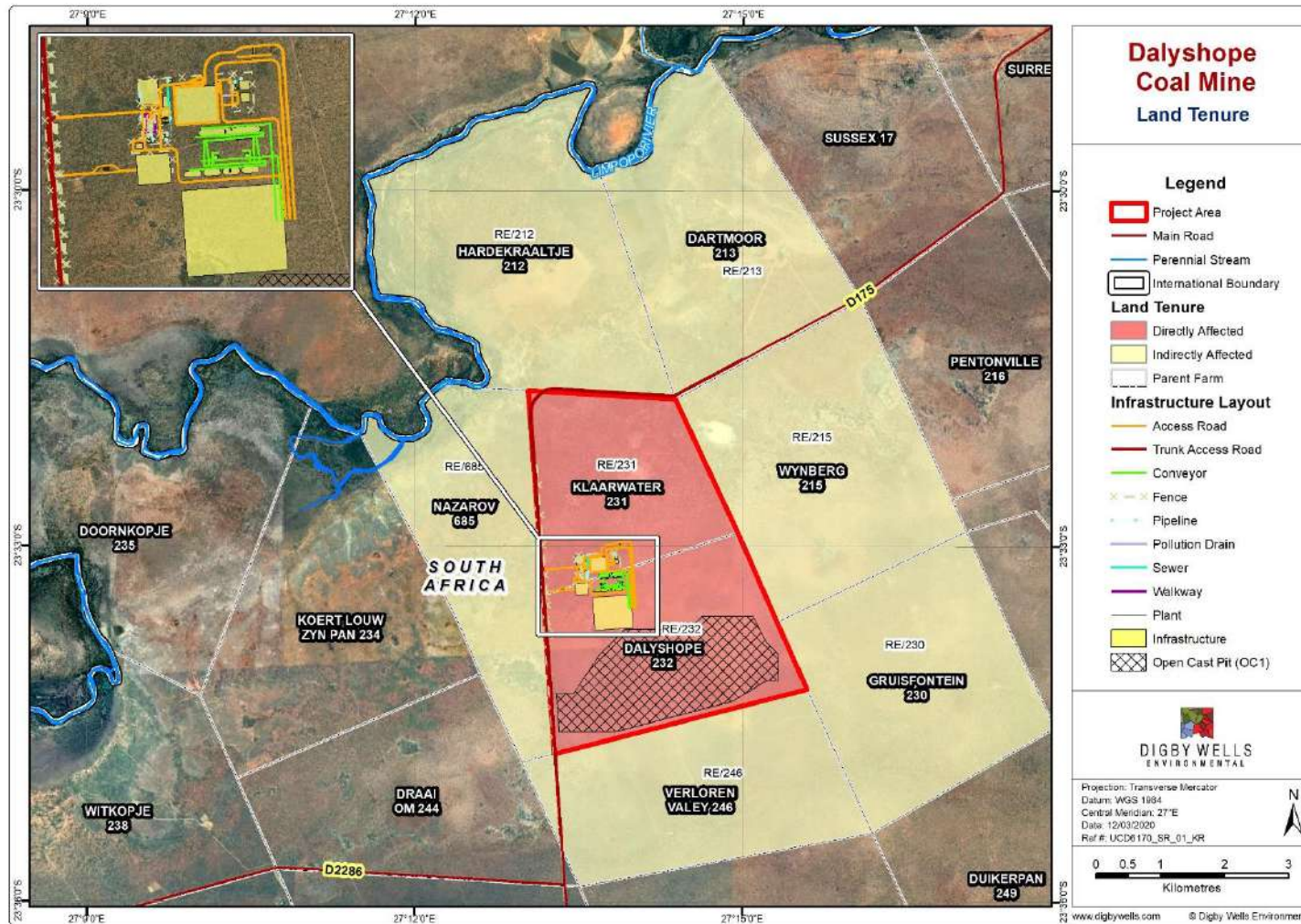


Figure 2-2: Locality Map and Project Area

3 Project Description

The proposed Dalyshope Coal Mining Project is situated within the Waterberg Coalfield of Limpopo Province. Anglo proposes to extract coal from Open Cast Pit 1 (OC1) (409.32 ha) through opencast mining using selective mining techniques. All mining related infrastructure covers a surface area of approximately 47.33 ha (excluding linear infrastructure and OC1). The Farms Dalyshope 232 LQ and Klarwater 231 LQ are the directly affected farm portions.



Figure 3: Open cast coal mine

The Project plans to establish a contractor operated truck and shovel opencast mine, producing approximately 2.4 million tonnes per annum (Mtpa) of thermal coal product for approximately five years. After five years, the mine will ramp up production to approximately 12 Mtpa of product for approximately 25 years from a single open pit, giving a total Life of Mine (LoM) of approximately 30 years. The product will be placed on stockpiles before being transported to market and it will either be transported by road haulers on the district/ provincial road or by means of rail should a rail line prove economically viable.

Table 1 The proposed infrastructure required

• Contractors laydown yard	• Laboratory
• Temporary stockpiles for construction	• Laundry facility
• Temporary PCD for construction	• Water tanks
• Opencast 1 ("OC1") pit	• Potable water Pipeline and distribution
• ROM stockpiles	• Dirty water pipeline
• Slew product stockpiles	• Sewage Treatment Plant (STP)
• Discard facility	• Water Treatment Plant (WTP)
• Topsoil and subsoil stockpiles	• Brine Pond
• Overburden (Hards/Softs) stockpiles	• Diesel/wash bay and oil separator
• Weighbridges	• Explosives magazine
• Conveyers belts	• Stormwater management infrastructure
• Workshop	• Powerline/s
• Two PCDs	• Substation
• Washing plant	• Rail link and Rail loadout facility
• Crush and Screen plant	• Brake-test ramp
• Offices	• LDV and light vehicle access road
• Change-house	• Truck access road
• Stores	• Road upgrade (Steenbokpan to site)

4 Environmental Authorisation Process

Universal, on behalf of Anglo, is applying for the following authorisations and licences, which are required prior to the commencement of mining operations:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA);
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);

Through this application, one consolidated Environmental Authorisation application process is being undertaken to fulfil the requirements of these processes in accordance with the one environmental system.

5 Public Participation Process

The PPP has been **partially** initiated with the purpose of sharing project information and gathering comments from stakeholders. Stakeholders are hereby invited to register as Interested and Affected Parties (I&APs) and to submit their comments regarding the proposed project. Registered I&APs will be informed about availability of reports via their preferred means of communication (SMS, email, post or fax). Contributions from I&APs will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting studies. Stakeholders and I&APs can submit their comments and issues directly to the Digby Wells Stakeholder Engagement Team by completing the Comment and Registration Sheet appended to the end of this document.

Digby Wells hereby informs I&APs that the Draft Scoping Report is available for public review. The aforementioned report will be available for public comments for a period of 30 days, from **24 June 2020 to 24 July 2020** for a 30-day legislated period.

I&APs will be sent notification of public consultation meetings for the Scoping Phase at a later date.

The environmental process is summarised in Figure 5-1 and it also indicates the critical stages for stakeholder engagement.

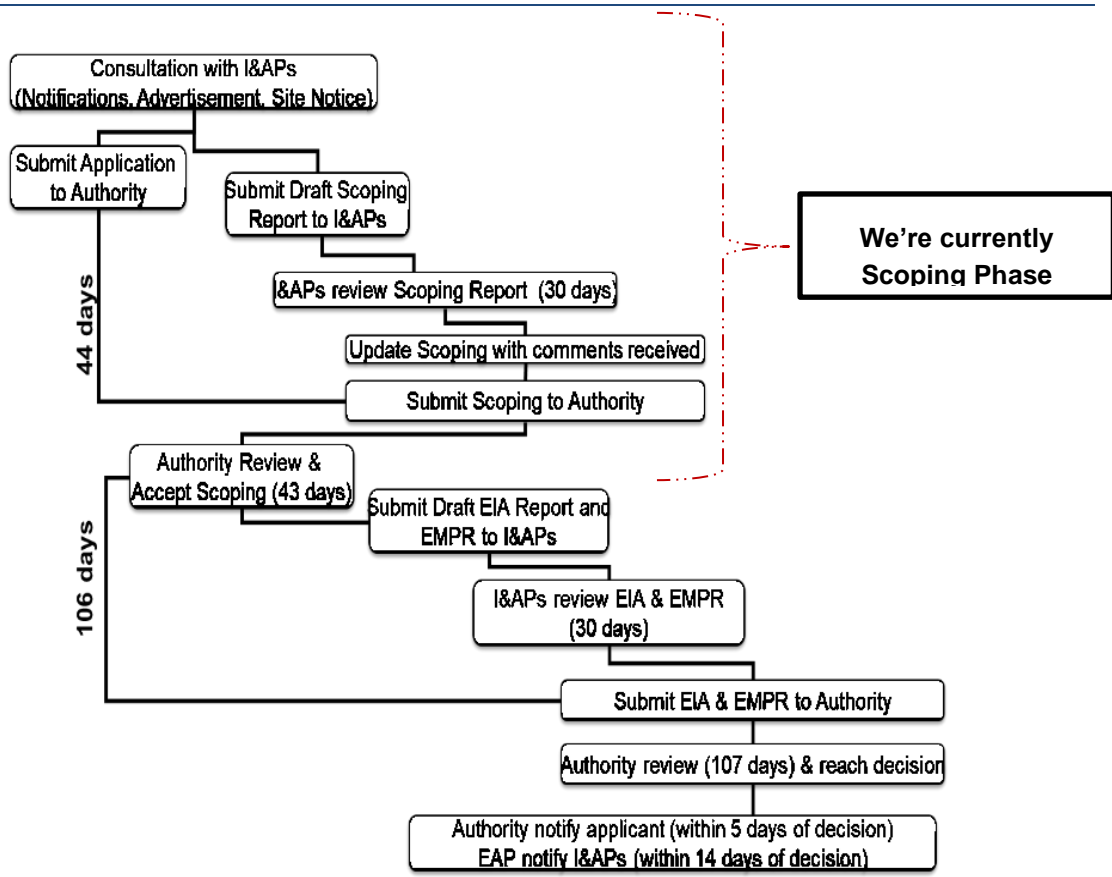


Figure 5-1: The Full Scoping and EIA process flowchart

As indicated in Figure 5-1 we are currently in the Scoping Phase of the Project and the Draft Scoping Report is currently electronically available for public comments on the Digby Wells website (see ***Due to the COVID-19 national lock down, the Draft Scoping Report has been released electronically. To access the report (free of charge/ data-free); please click on the following link*** <http://view.datafree.co/PublicDocuments/> or copy the link onto your URL to download the Report for your review and comment.

Table 5-1 below).

Due to the COVID-19 national lock down, the Draft Scoping Report has been released electronically. To access the report (free of charge/ data-free); please click on the following link <http://view.datafree.co/PublicDocuments/> or copy the link onto your URL to download the Report for your review and comment.

Table 5-1: Scoping Report Availability

Contact Person	Public Place /Location	Contact
Electronic Copies		

Background Information Document

Environmental Regulatory Process Required for The Proposed Dalyshope Coal Mining Project
Near Steenbokpan, Limpopo Province

UCD6170



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Janet Mkhabela	http://view.datafree.co/PublicDocuments/ www.digbywells.com (under Public Documents)	sh@digbywells.com
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**Environmental Regulatory Process required for the proposed Environmental
Regulatory Process Required for The Proposed Dalyshope Coal Mining Project
Near Steenbokpan, Limpopo Province**

REGISTRATION AND COMMENT FORM

JUNE 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela / or Thembinkosi Zulu of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	Yes		No	
I would like to receive my notifications by	Email	SMS	Post	Fax

Please indicate which sector you represent and also provide a name

Government Department	
Municipality	
Community	
Non-Government Organisation	
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	
Land occupier	



Please fill in your contact details below for the project database

Title, Full Name				
Designation				
Cellphone		Fax		Tel
Email				
Postal Address				

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we *gather comments* from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?
How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)
How can these impacts be managed, avoided and / or fixed?
If you are a landowner or occupier, what is your land currently being used for?
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?

Where are these found?
Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)
If so how can these impacts (affects) be managed, avoided or fixed?

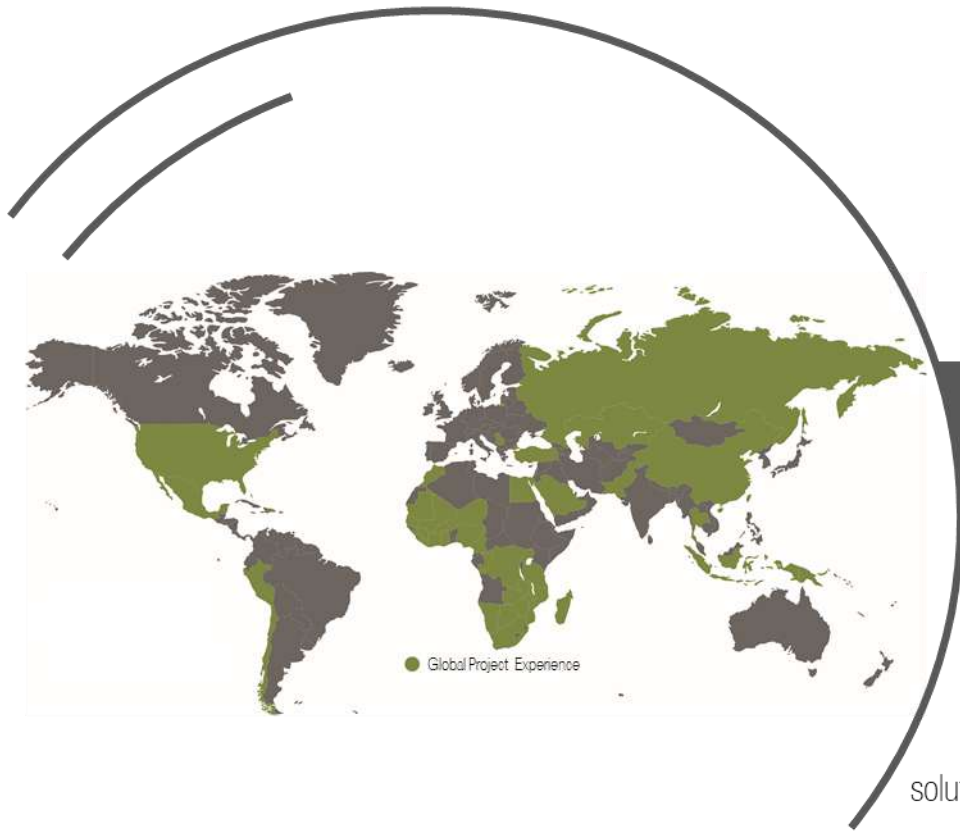
General Comments

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name		Title, Full Name	
Organisation		Organisation	
Cellphone		Cellphone	
Email		Email	

Signature: _____

Date: _____



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TSHEDIMOSO YA TIKOLOGO YE E HLOKAGALAGO MALEBANA LE PROJEKE YA MOEPO WA MALAHLA/ MASHALA WA DALYSHOPE KGAUSWI LE STEENBOKPAN, PROFENSENG YA LIMPOPO

Tokomane ya tshedimoshō

E lokišeditšwe:

Universal Coal (Pty) Ltd

Nomoro ya projeke:

UCD6170

17 Aporele 2020

Go ngwadiša le go tseba ka tše ntši, ka kgopelo šomiša tshedimošo ye:

Mme Janet Mkhabela / goba Mme Thembinkosi Zulu

Digby Wells Environmental (Pty) Ltd.

PO Box 10046, Randburg, 2125

Mogala: (011) 789 9495

Fekese: (011) 789 9498 / (011) 069 6801

Imeili: gh@digbywells.com

Weposaete: www.digbywells.com

1 Morero wa tokomane

Moreromogolo wa tokomane ye ke go fa bohle bao ba nago le kgahlego le bao ba amegilego ka boitsebišo bjo bo amanago le projeke ye e šišintšwego ya moepo wa malahla/mashala kwa Dalyshope kgauswi le Steenbokpan, profenseng ya Limpopo.

Maikemišetšo a tokomane ye ke go:

- Fana ka ditlhalošo tša projeke ye e šišintšwego;
- Fana ka kakaretšo ya mekgwa ye e hlokwago ya taolo;
- Fana ka dintlha go latela morero wa go tšea karolo ga setšhaba ka kakaretšo; le
- Kopa baamegi ka moka go ingwadiša, go tseya karolo, go fana ka maikutlo, go hlagiša ditaba goba matshwenyego, gammogo le go fana ka ditlhagišo molemong wa morero.

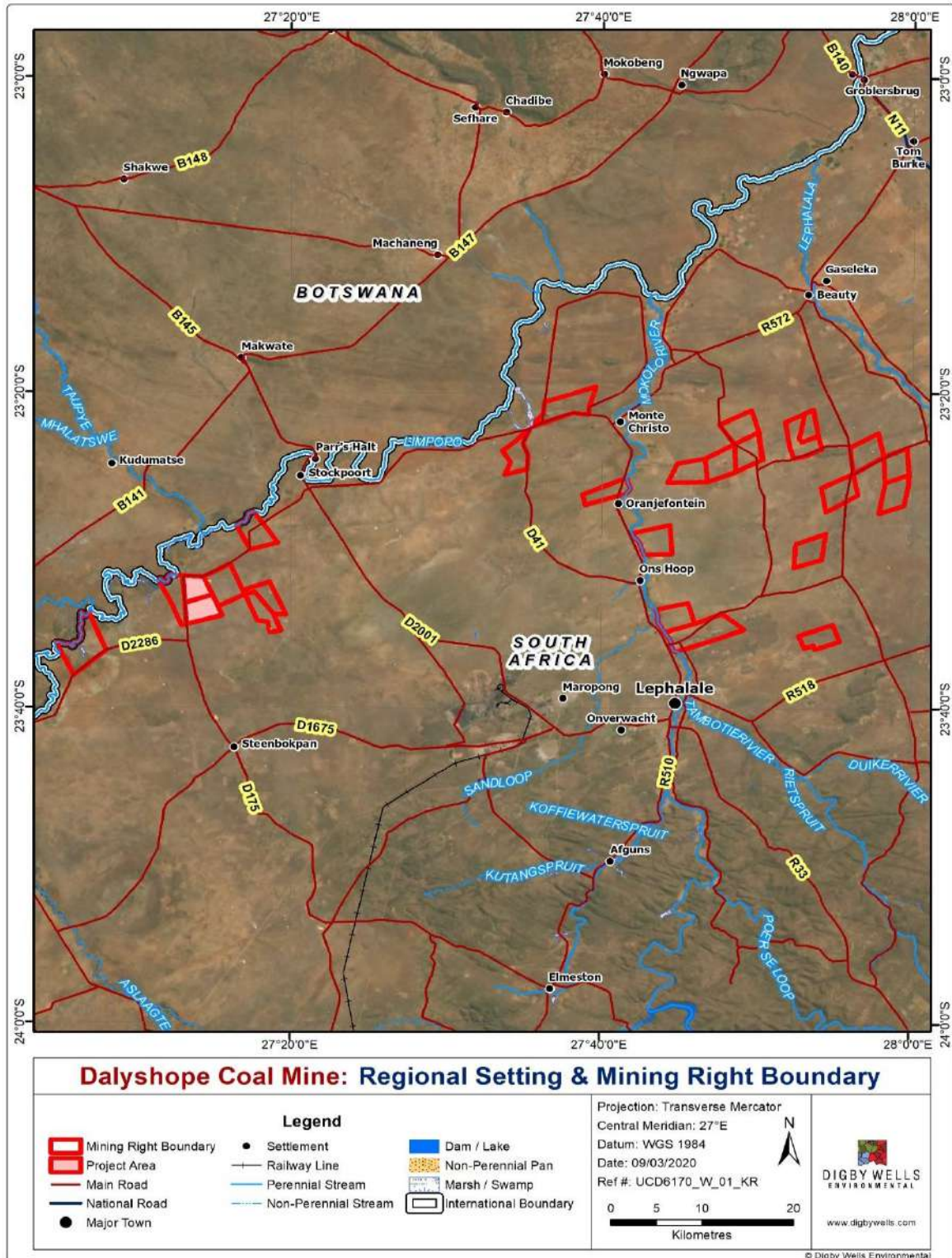
2 Tlhagišo ya projeke gammogo le lefelo

Anglo Operations (Pty) Ltd (Anglo goba Mokgopedi) e šomišana mmogo le Universal Coal Development IV (Pty) Ltd (Universal) go tsea karolo go morero wa tlhagišo ya merafo ya Dalyshope (Morero) ka go thekgana ka dichelete le go sepetsa tšwelopele ya projeke gammogo le go akaretsa kgopelo ya ditokelo tsa moepo.

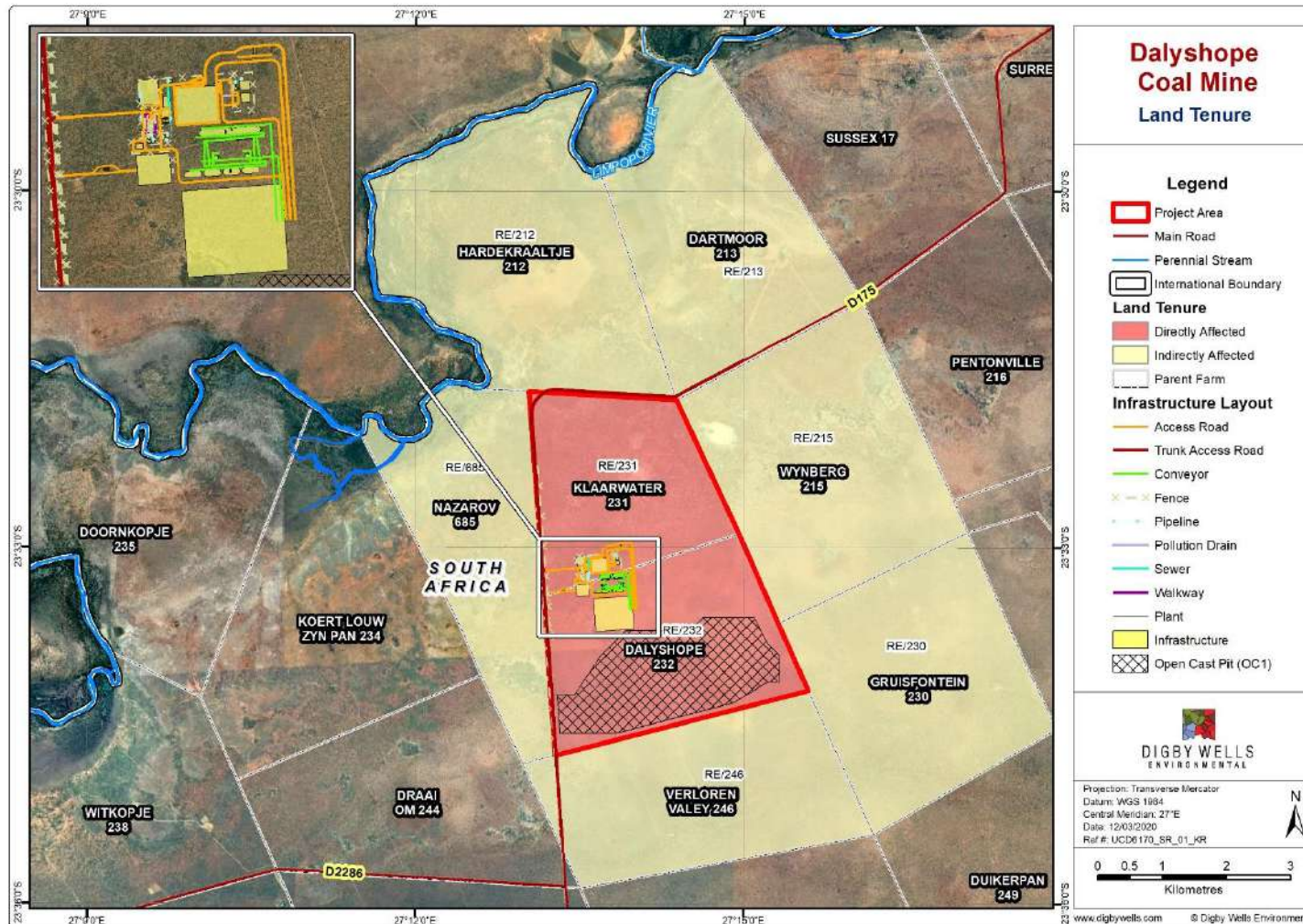
Anglo ke motshwari wa ditokelo tše pedi tša go lekola diminerale tše di amogetšwego ke lefapha la diminerale le tša dihlagišwa (DMRE), nomoro ya gona ke LP 30/5/1/1/2/10648 PR le LP30/5/1/1/2/ 10649 PR (bjalo ka ge di tsosolositšwe) gape e dumeletšwe go ya ka molao wa tsošološo ya diminerale le petroli, wa ngwaga wa dikete pedi le metso e mebedi (2002) (Molao wa 28 wa 2002) (MPRDA) go lebelela mashala goba malahla.

Universal Coal ke yona e tla ba e sepetsa ditshepedišo ka moka tša kgopelo ya morero, le ge go le bjalo, Anglo e tla dula e le mokgopedi.

Setšwantšo sa 2-1 ka fase se bontšha bogolo bja nagana yeo projeke e tla ba e le gona, eupša ya meepo (e totobaditšwego ka pinki) ke moo moepo wa malahla wa Dalyshope o tla ba o le gona. Setšwantšo sa 2-2 se bontšha dipolase tše di amanago le moepo wa Dalyshope le polokelo ya meago ye e amanago le moepo.



Setshwantsho 2-1: Mmepo wa Setereke le Ditsha tša Moepo



Setshwantsho 2-2: Mmepa wa tikologo selegae

3 Tlhaloso ya projeke

Projeke ye e šišintšwego ya moepo wa Dalyshope e kgwetšagala seleteng sa Waterburg Coalfield, profenseng ya Limpopo. Anglo e akanya go tlhagisa malahla moepong wa (OC1) (409.32 ha) ka go šomiša mekgwa ye ikhethileng ya meepo. Meago ka moka ye e amanago le moepo e tlo tseya lefase le sebaka se ka bang dihekthere tše masome nne shupa fegelwana masome a mararo a mentsho e meraro (47.33) (ntle le meago ya ditselana le moepo wa OC1). Polase ya Dalyshope 232 LQ le Klaarwater 231 LQ ke dikarolo tše amegang ka kotlollogo ya polase.



Setshwantsho 3-1: Moepo wa malahla

Projeke e ikemiseditse go tšweletša koloi ya go rwala (truck) ye e laolwago ke kontraka le moepo wo o tlo tšweletša malahla a go lekana di-tinne tša dimilione tse pedi le metso e mene (2,4 million) ka ngwaga go fihlila ka mengwaga ye e ka bago ye mehlano (05). Ka morago ga mengwaga ye mehlano (05), moepo o tla oketša tšweletšo ya malahla go fihla mengwageng ye e ka bago ye masome pedi hlano (25) moleteng wo tee, moo bophelokakaretšo bja moepo e tla ba mengwaga ye masome tharo (30). Setšweletšwa (Malahla) se tla kgoboketšwa moepong pele se rekiswa, gomme se tla sepedišwa ka dikoloi tsa merwalo (trucks) tša selete goba mebila ya profense goba ka terene ge eba seporo se ka bonagala se na le mohola moruong.

Sethalwa 3-1: Meago ya go hlokega

<ul style="list-style-type: none"> Jarata ya boikhutso ya bo rakonteraka 	<ul style="list-style-type: none"> Moago wa go lekanya malahla
<ul style="list-style-type: none"> Moago wa nakwana wa polokelo ya baagi 	<ul style="list-style-type: none"> Moago wa go hlatswetsa diaparo
<ul style="list-style-type: none"> Sekoti sa moepo wa malahla 	<ul style="list-style-type: none"> Ditanka tsa metsi
<ul style="list-style-type: none"> Lefelo la go beya mabu a ka godimo 	<ul style="list-style-type: none"> Diphaephe tsa go sepetsa meetse a go nwa

<ul style="list-style-type: none"> Lefelo la go beya mabu a go akaretsa goba go tshireletsa moepo 	<ul style="list-style-type: none"> Diphaephe tsa go sepetsa meetse a ditshila
<ul style="list-style-type: none"> Leporogo la go gatisa dikoloi tsa merwalo 	<ul style="list-style-type: none"> Moago wa go hlwekisa meetse a ditshila
<ul style="list-style-type: none"> Mapanta a go sepetsa malahla goba ditsweletswa 	<ul style="list-style-type: none"> Moago wa go beya di diriswa tsa hlobaetso goba tsharakanyo
<ul style="list-style-type: none"> Moago wa go lokisetša dikoloi tsa merwalo le tse dingwe 	<ul style="list-style-type: none"> Lefelo la go garoganyana meetse le oli
<ul style="list-style-type: none"> Lefelo la go hlatswa setsweletswa (malahla) 	<ul style="list-style-type: none"> Tsela ya dikoloi
<ul style="list-style-type: none"> Lefelo la go kgetholla setsweletswa (malahla) 	<ul style="list-style-type: none"> Moago wa go laola meetse a pula ya medupi
<ul style="list-style-type: none"> Diofisi 	<ul style="list-style-type: none"> Tsela ya dikoloi tsa merwalo
<ul style="list-style-type: none"> Dintlo tsa go hlapa le bo ithomelo 	<ul style="list-style-type: none"> Nhlatatso ya tsela ya Steenbokpan ya go tla moepong
<ul style="list-style-type: none"> Mabenkele 	<ul style="list-style-type: none"> Kgokagano ya diterene le seteishene sa diterene
<ul style="list-style-type: none"> Lefelo la go lekola diporiki tsa dikoloi 	

4 Tshepedišo ya tumelelo ya tikologo

Universal, sebakeng sa Anglo, e dira dikgopelo tša magwalo a tumelelo ya moepo. Tše di latelago ke tse di nyakegago pele moepo o ka bulwa:

- Lengwalo la tumelelo ya moepo go ya ka molao wa dihlagiswa tsa mmu (MPRDA);
- Legwalo goba tumelelo ya go tswa go ba lefapha la hlokomelo ya tikologo yeo e theilwego godimo ga molao wa ngwaga wa 1998 sengwala sa 107
- Lengwalo la tumelelo ya go kgoboketsa goba go hlokomela ditshila leo le theilwego godimo ga molao wa hlokomelo ya tikologo wa ngwaga wa 2008 molao wa bo 59
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);

Ka kgopelo ye, go dirwa tumelelo ya tikologo ye tee ye e kopanego go phethagatša dinyakwa tša ditshepedišo tša go latela tshepedišo ya tikologo.

5 Tshepedišo ya go tseya karolo ga setšhaba

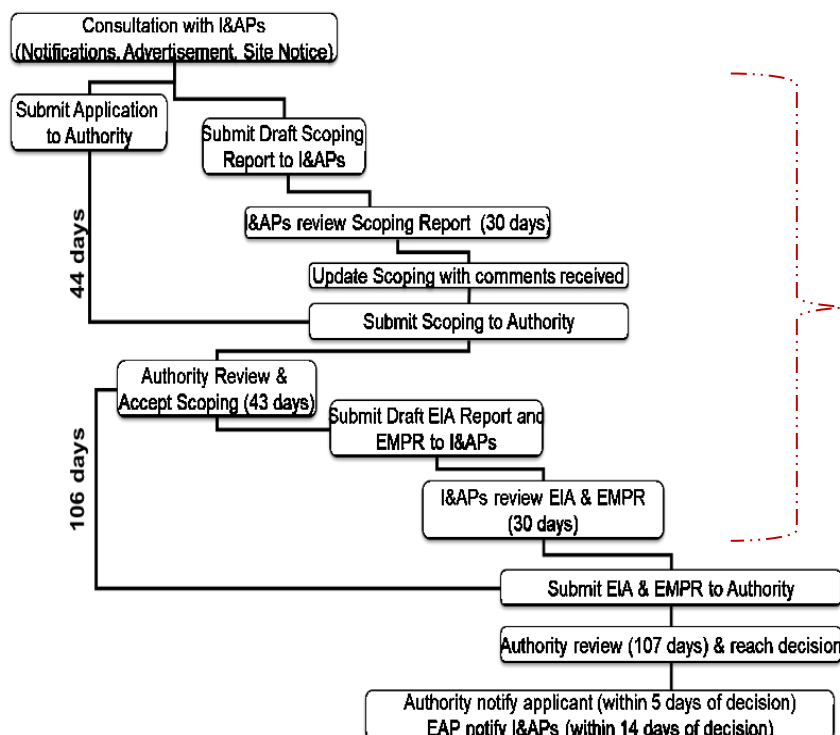
Moreromogolo wa go tseya karolo ga setšhaba mo projeke ke go abelana ka tshedimošo le go fa sechaba sebaka sa go ntsha maikutlo mabapi le projeke. Sechaba ka moka se kgopelwa go ingwadiša bjalo ka baamegi le bakgahlegi, go fana ka maikutlo mabapi le projeke. Batšearolo ba ba ingwadišitšego ba tla kgwetsa ditaba ka moka ka mokgwa wa maleba wo ba o kgethago bjalo ka (di-SMS, imeile, poso goba fekse). Dikakanyo ka moka tsa go tswa go baamegi le batseakarolo di tla thusa ba molao wa tikologo le sehlopha sa projeke go tseya sephetho sa maleba. Baamegi ba ka fana ka dikakanyo le maele a bona go sehlopha sa projeke sa Digby Wells Stakeholder Engagement ka go tlatsa lephepha la boingwadišo leo le latelago mafelelong a tokomane ye.

Digby Wells ka tsela ye e tsebisa baamegi gore tokomane ya botlalo ya morero wa projeke e gona, ebile sechaba se dumeletswe go fana ka maikutlo le dikakanyo.

Sechaba se kgopelwa go fana ka maikutlo le dikakanyo go thoma ka tsatsi la masome pedi nne Phutjane 2020 (24 June 2020) go fiha ka letsatsi la masome pedi nne la Phupu (24 July 2020). Sechaba se filwe matsatsi a masome tharo go fana ka dikakanyo go ya ka molao.

Sechaba le baamegi ka kakaretso ba tla romelwa melaetsa le ditsebišo mabapi le tswelopele ya projeke ge nako e tswela pele

Tsela ya maleba ya go sepetsa ditaba mabapi le projeke e bontshwa setshwantshong sa go latela.



Gabjale re mo seemong sa projeke fao sechaba se fanago ka dikakanyo le maikutlo.

Setshwantsho 5-1: Tsela ya maleba ya go sepetsa projeke

Bjalo ka ge go bontšitšwe go setshwantsho sa ka godimo, ga bjale re sa le legatong la go fa baamegi sebaka sa go ntsha maikutlo le dikakanyo. Digwalwa ka moka dikgwetswa go website ya Digby Wells Environmental.

Ka lebaka la go tswalelwa ga naga ka morago ga bolwetsi ba COVID-19, tokomane ya projeke e lokollotswe ka mokgwa wa elektroniki. Yona e ka khumanega ntle le go lefa mo go <http://view.datafree.co/PublicDocuments/>

Sethalwa 5-1: khumanego ya segwalwa sa tshedimoso

Mokgokaganyi	Lefelo	Tsela ya go ikopanya
Dikhopi tsa elektroniki		
Mme Janet Mkhabela	http://view.datafree.co/PublicDocuments/ www.digbywells.com (ditokomane tsa sechaba)	sh@digbywells.com



Tshepedišo ya melao ya tikologo ye e nyakegago bakeng sa tshepidiso ya projeke ya moepo wa malahla wa Dalyshope kgauswi le Steenbokpan, profenseng ya Limpopo

FOMO YA BOINGWADISO LE GO HLAGISA DIKAKANYO

PHUTJANE (JUNE) 2020

Sechaba le baamegi bao ba ingwadishitsego ba tla tsebiswa ka tswelopele ya projeke ka mokgwa wo ba o kgethilego wa poledishano (SMS, imeile, poso goba fekese). Tokomane ya tshedimoso e khumanega ka mokgwa wa elektroniki gore batho ba ntshe maikutlo le dikakanyo. Digwalwa ka moka di khumanega go webosaete ya Digby Wells www.digbywells.com (ka fase ga ditokomane tsa sechaba). Dikakanyo le maele ka moka di tla thusa bo ramolago ba mmuso gammogo le sehlopha sa projeke go tseya sephetho sa maleba. Ka kgopelo, ingwadise bjalo ka moamegi le mokgahlegi gomme o fane ka dikakanyo le maikutlo ka go tlatsa le go romela fomo ye, goba ka mekgwa ye mengwe ya poledisano ye e latelago:

Mme. Janet Mkhabela / goba **Thembinkosi Zulu** ba Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Ka kgopelo, ingwadise bjalo ka moamegi	Ee		Aowa	
	imeile	SMS	Poso	Fekese
Ke rata go amogela ditsebiso ka mokgwa wa:				

Ka kgopelo, kgetha gore o emela lekala lefe gomme o fane ka leina

Lefapha la mmuso wa godimo la naga (Government Department)	
Lefapha la mmuso wa selegae (Municipality)	
Sechaba (Community)	
Mokgahlo o e seng wa mmuso (Non-Government Organisation)	
Kgwebo (Business)	

Tokomane ya tshedimosho

Projeke ya moepo wa malahla/ mashala wa dalyshope kgauswi le steenbokpan, profenseng ya limpopo

UCD6170



Ge eba o moagi wa naga goba modudi wa naga, ka kgopelo bontša gore na ke naga efe le karolo efe yeo o dulago go yona

Mong mabu (landowner)	
Modudi (Land occupier)	

Ka kgopelo tlatša dintlha tša gago tša poledišano goba kgokaganyo sebakeng

Tlhakathomo le leina			
O beraka kae			
Sellathekeng	Fekese		Mogala
Imeile			
Aterese ya poso			

Molaotheo wa **Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1)** o laela gore sechaba le baamegi ka moka ba kgwetse sebaka sa go fana ka maikutlo le dikakanyo. Ka kgopelo araba dipotsiso tseo dilatelago. Ge o hloka thuso go araba dipotsiso tse di latelago, kgopela thuso go molaodi goba mosepitse wa morero, di tlabakelo tsa gagwe di ko godimo.

O nagana gore projeke ye e ka go ama bjang?
O nagana gore projeke ye e ka ama maemo a gago a bophelo bjang? (bjalo ka mekgwa ya boiphedišo, polase, kgwebo, ntlo)
Ditlamorago di ka lokiswa bjang, goba go thibelwa bjang?
Ge eba o molemi, goba mongnaga, naa naga ya gago e šomišwa eng gabjale?

Tokomane ya tshedimoshō

Projeke ya moepo wa malahla/ mashala wa dalyshope kgauswi le steenbokpan, profenseng ya limpopo

UCD6170



Naa go na le dikarolo tsa tikologo (bjalo ka mabitla, meago ya kgale gammogo le dikereke) lefelong leo projeke e tlo bang gona?
Tšona di kgwetsagala kae?
O nagana gore projeke e ka ama meago ya sechaba bjang (bjalo ka dintlo, meago le ditsela)?
Ge go le bjalo, ditlamorago tseo di ka lokiswa goba go thibelwa bjang?

Dikakanyo le maikutlo a mangwe

Ge e ba gona le baamegi ba bagwe bao o akanyago gore ba lokelwe mo lenanegong la projeke, ka kgopelo fana ka ditlabakelo tsa bona.

Leina ka botlalo		Leina ka botlalo	
Mokgahlo		Mokgahlo	
Sellathekeng		Sellathekeng	
Imeile		Imeile	

Mosaeno: _____

Letsatsi: _____



DIGBY WELLS
ENVIRONMENTAL

Appendix E: Notification Letters



17 April 2020

Project No: UCD6170

ENVIRONMENTAL REGULATORY PROCESSES REQUIRED FOR THE PROPOSED DALYSHOPE COAL MINING PROJECT, SITUATED IN THE MAGISTERIAL DISTRICT OF LEPHALALE, LIMPOPO PROVINCE

DMR Reference Numbers: LP 30/5/1/1/2/10648 PR (as renewed) and LP 30/5/1/1/2/ 10649 PR (as renewed).

Dear Stakeholders

Anglo Operations Pty Ltd (hereafter Anglo or the Applicant) has partnered with Universal Coal Development IV (Pty) Ltd (hereafter Universal) to participate in the proposed Dalyshope Coal Mining Project (the Project) through funding and managing the project development, including the Mining Right application. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resource and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and 30/5/1/1/2/ 10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal.

Universal, on behalf of Anglo, is applying for the following authorisations and licences, which are required prior to the commencement of mining operations:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA);
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);

The Project proposes to extract coal from Open Cast Pit 1 (OC1) (409.32 ha) through opencast mining using selective mining techniques. The proposed mining activities will only take place on the two farms; Farms Dalyshope 232 LQ and Klaarwater 231 LQ. All mining related infrastructure covers a surface area of approximately 47.33 ha (excluding linear infrastructure and OC1).

This letter serves to inform you, as a potential Interested and Affected Party (I&AP) of the proposed Project and associated application process. As part of the Environmental Process, a Public Participation Process (PPP) must be undertaken in terms of Regulation 40 to 44 of the Environmental Impact Assessment (EIA) Regulations, 2014 (GN R 982 of 4 December

2014 as amended by GN R326 of 7 April 2017) (EIA Regulations, 2014), as amended, promulgated under the NEMA.

The PPP involves notifying stakeholders of the proposed project and providing stakeholders with sufficient information about the proposed project to enable effective stakeholder engagement. Stakeholders affected by, or who are interested in the proposed project, are invited to register as an I&AP.

Due to the COVID-19 national lock down, the Draft Scoping Report has been released electronically. Once the lock down comes to an end, Digby Wells will communicate the extended public comment period, as well as release hard copies of the Draft Scoping Reports at public venues. However, you are welcome to provide comments prior to the extended public comment period commences.

Please use the Project reference number when providing your comment: **UCD6170**

Contact Person	Public Place /Location	Contact
Electronic Copies		
Janet Mkhabela	www.digbywells.com (under Public Documents).	sh@digbywells.com

Public Meeting Notification

A notification will be provided detailing the public comment period once the national lock down comes to an end, which will also provide details of the Scoping Phase public meeting.

Stakeholders affected by, or who are interested in the proposed Project are invited to register as an I&AP. Please complete and return the registration and comment form appended to the Background Information Document, or email your details to Digby Wells to register as an I&AP and to indicate your interest in receiving further information regarding the EIA process.

Regards,



Janet Mkhabela

Stakeholder Engagement Office

Digby Wells Environmental



24 June 2020

Project No: UCD6170

ENVIRONMENTAL REGULATORY PROCESSES REQUIRED FOR THE PROPOSED DALYSHOPE COAL MINING PROJECT, SITUATED IN THE MAGISTERIAL DISTRICT OF LEPHALALE, LIMPOPO PROVINCE

DMR Reference Numbers: LP 30/5/1/1/2/10648 PR (as renewed) and LP 30/5/1/1/2/ 10649 PR (as renewed).

Dear Stakeholders,

Anglo Operations Pty) Ltd (hereafter Anglo or the Applicant) has partnered with Universal Coal Development IV (Pty) Ltd (hereafter Universal) to participate in the proposed Dalyshope Coal Mining Project (the Project) through funding and managing the project development, including the Mining Right application. Anglo is the holder of two Prospecting Rights approved by the Department of Mineral Resource and Energy (DMRE), reference numbers LP 30/5/1/1/2/10648 PR (as renewed) and 30/5/1/1/2/ 10649 PR (as renewed), and authorised in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) to prospect for coal.

Universal, on behalf of Anglo, is applying for the following authorisations and licences, which are required prior to the commencement of mining operations:

- A Mining Right in terms of the MPRDA;
- An Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management Licence (WML) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA);
- An Integrated Water Use Licence (IWUL) in in terms of the National Water Act, 1998 (Act No. 38 of 1998) (NWA);

The Project proposes to extract coal from Open Cast Pit 1 (OC1) (409.32 ha) through opencast mining using selective mining techniques. The proposed mining activities will only take place on the two farms; Farms Dalyshope 232 LQ and Klaarwater 231 LQ. All mining related infrastructure covers a surface area of approximately 47.33 ha (excluding linear infrastructure and OC1).

This letter serves to inform you, as a potential Interested and Affected Party (I&AP) of the proposed Project and associated application process. As part of the Environmental Process, a Public Participation Process (PPP) must be undertaken in terms of Regulation 40 to 44 of the Environmental Impact Assessment (EIA) Regulations, 2014 (GN R 982 of 4 December

2014 as amended by GN R326 of 7 April 2017) (EIA Regulations, 2014), as amended, promulgated under the NEMA.

The PPP involves notifying stakeholders of the proposed project and providing stakeholders with sufficient information about the proposed project to enable effective stakeholder engagement. Stakeholders affected by, or who are interested in the proposed project, are invited to register as an I&AP.

Digby Wells hereby informs I&APs that the Draft Scoping Report is available for public review. The aforementioned report will be available for public comments for a period of 30 days, from **24 June 2020 to 24 July 2020** for a 30-day legislated period.

Due to the COVID-19 national lock down, the Draft Scoping Report has been released electronically. To access the report (free of charge/ data-free); please click on the following link <http://view.datafree.co/PublicDocuments/> or copy the link to your URL or visit our website.

Please use the Project reference number when providing your comment: **UCD6170**

Contact Person	Public Place /Location	Contact
Electronic Copies		
Janet Mkhabela	http://view.datafree.co/PublicDocuments/ OR www.digbywells.com (under Public Documents).	sh@digbywells.com

Public Meeting Notification

A separate notification will be distributed regarding public consultation meetings for the Scoping Phase.

Stakeholders affected by, or who are interested in the proposed Project are invited to register as an I&AP. Please complete and return the registration and comment form appended to the Background Information Document, or email your details to Digby Wells to register as an I&AP and to indicate your interest in receiving further information regarding the EIA process.

Regards,



Janet Mkhabela

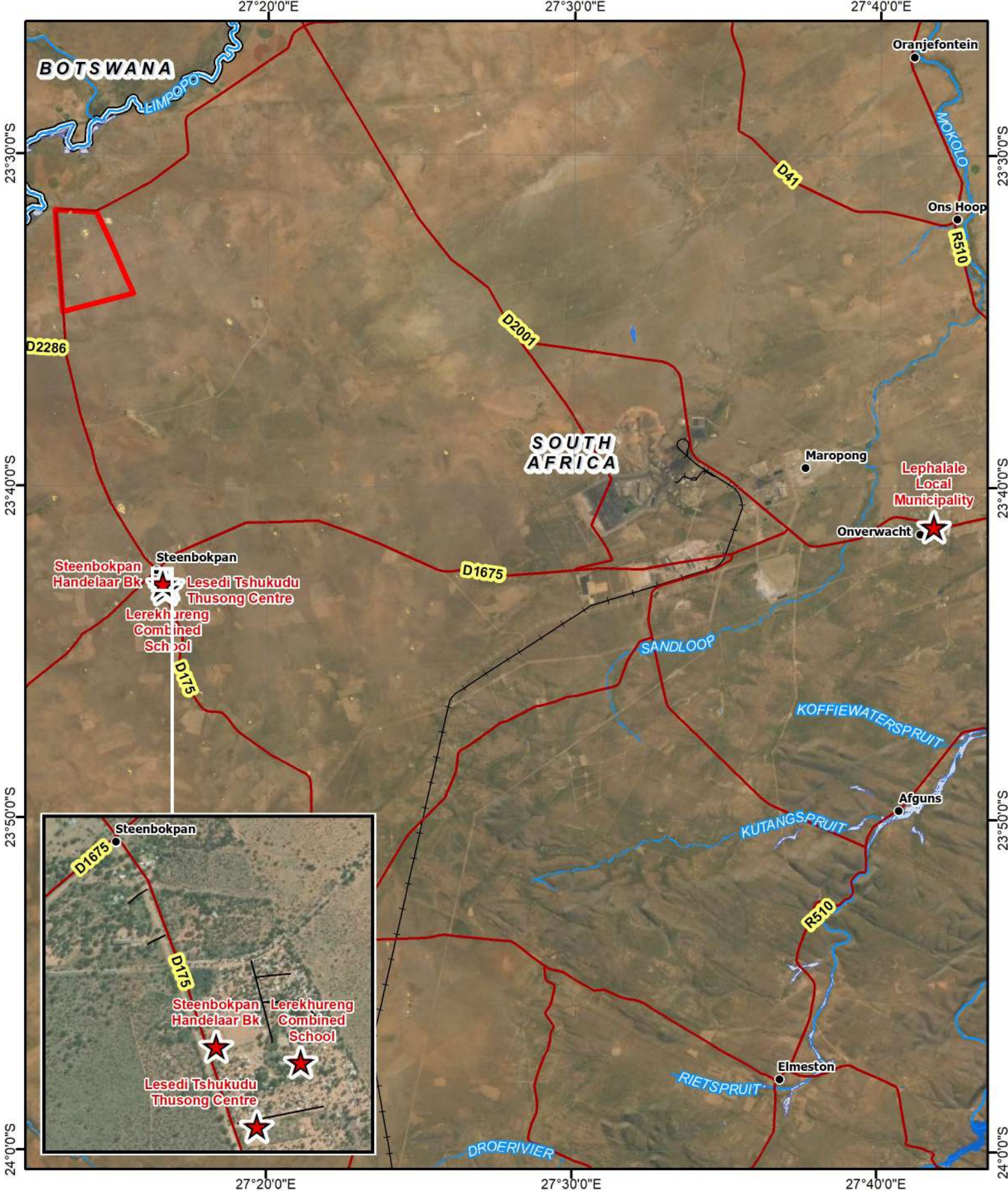
Stakeholder Engagement Office

Digby Wells Environmental



DIGBY WELLS
ENVIRONMENTAL

Appendix F: Site Notices

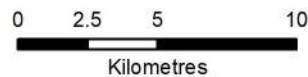


Dalyshope Coal Mine: Site Notice Locations

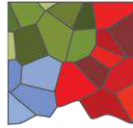
Legend

- | | |
|--|---|
| <ul style="list-style-type: none"> Project Area ★ Site Notice Locations Settlement Main Road Railway Line Perennial Stream | <ul style="list-style-type: none"> Non-Perennial Stream Dam / Lake Non-Perennial Pan Marsh / Swamp International Boundary |
|--|---|

Projection: Transverse Mercator
 Central Meridian: 27°E
 Datum: WGS 1984
 Date: 07/08/2020
 Ref #: UCD6170_PP_01_KR



www.digbywells.com



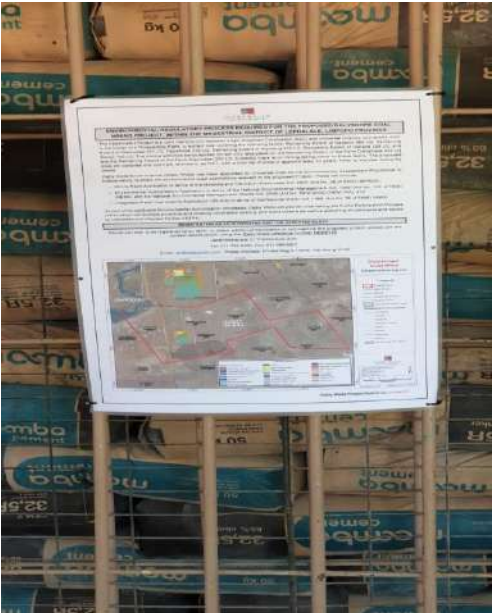
DIGBY WELLS ENVIRONMENTAL

Environmental Regulatory Processes Required for the Proposed Dalyshope Coal Mining Project, situated in the Magisterial District of Lephalale, Limpopo Province

SITE NOTICES PLACED AT PUBLIC PLACES ON TUESDAY 25 FEBRUARY 2020

Public Place	Coordinates	Pictures
(001)- Lephalale Local Municipality	23°41'10.54"S 27°41'47.67"E	
(002)- Lerekhureng Combined School	23°42'59.51"S 27°16'44.44"E	



<p>(003)- Lesedi Tshukudu Thusong Centre</p>	<p>23°43'7.13"S 27°16'39.24"E</p>	
<p>(004)- Steenbokpan Handelaar Bk (Local tuck shop)</p>	<p>23°42'57.60"S 27°16'34.36"E</p>	



DIGBY WELLS
ENVIRONMENTAL

Appendix G: SEP & Acceptance Letter



mineral resources & energy

Department:
Minerals Resources and Energy
REPUBLIC OF SOUTH AFRICA

Private Bag X 9467, Polokwane, 0700, Tel: 015 287 4700, Fax: 086 7101 045
DMRE Building, 101 Dorp Street, Polokwane, 0699

Enquiries: Mr T.C Kolani. **Ref:** LP 30/1/2/3/2/1(10183) EM
E-Mail Address: Thivhulawi.Kolani@dmre.gov.za
Sub-Directorate: Mine Environmental Management

BY E-MAIL

The Mine Manager
Anglo Operations Proprietary Limited
PO Box 61587
Marshalltown
JOHANNESBURG
South Africa
2107

For attention: Leonore van Wyk

Email: Leonore.vanwyk@angloamerican.com

Cell phone: +27 (0)76 822 0399

APPROVAL OF STAKEHOLDER ENGAGEMENT PLAN FOR INTEGRATED ENVIRONMENTAL AUTHORISATION LODGED IN TERMS OF SECTION 24 L OF NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) READ WITH REGULATION 21 OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 FOR MINING RIGHT AND RELATED INFRASTRUCTURAL ACTIVITIES ON THE FARMS GREENRUST 708 LQ, GAYLAD 208 LQ, ROOIBOSLAAGTE 144 LQ, HILTON 190 LQ (PORTION 1 AND RE), STELLENBOSCH 203 LQ, SURREY 18 LQ, VIRGINIA 6 LQ, VRYPLAATS 163 LQ (PORTION 1 AND RE), CANADA 229 LQ (RE), MATOPI 705 LQ (RE), DALYSHOPE 232 LQ (RE), WYNBERG 215 LQ, BOOMPAN 237 LQ, BREDA 147 LQ (PORTION 2), BESKA 180 LQ, ECARTE 156 LQ, FAIRFIELD 154 LQ (PORTIONS 1, 2 AND RE), KROMHOEK 193 LQ (PORTION 1 AND RE), VUCHT 436 LQ (PORTIONS 1, 4 AND RE), ARARAT 723 LQ, A PORTION OF THE FARM, WELTEVREDEN 200 LQ (PORTION 1 AND RE), WOLVENDRAAI 481 LQ RE, MARSEILLES 739 LQ RE (BUFFELDRAAI 703 LQ), CONSTANTIA 122 LQ (PORTION 1, RE), FIG TREE 716 LQ (RE), KLAARWATER 231 LQ (RE), NAZAROV 685 LQ (A PORTION OF KLAARWATER 231 AND DALYSHOPE 232 LQ SUBDIVIDED TO FORM NAZAROV FARM), SITUATED IN LEPHALALE: LIMPOPO REGION.

The above matter has reference;

I refer to the abovementioned matter and confirm that your Stakeholder Engagement Plan for an application for Integrated Environmental Authorisation herein referred to as "IEA" lodged on **19 June 2020** is hereby approved.

You can now commence with the process of engaging all interested and affected parties regarding the proposed development project, however it must be noted that it is the responsibility of the Environmental Assessment Practitioner and the Applicant to ensure that all reasonable measures to combat the spread of Covid-19 are implemented at all times when conducting participation process.

Please note that any deviation from the approved plan must get necessary approval from this department prior to the implementation of any changes.

Hoping that you will find the above in order

Kind Regards,

Electronically signed

REGIONAL MANAGER:

MINERAL AND PETROLEUM REGULATION- LIMPOPO REGION

DATE: 01 July 2020



DIGBY WELLS
ENVIRONMENTAL

To:	T.C Kolani	Date:	19 June 2020
From:	Xan Taylor	Proj #:	LP 30/1/2/3/2/1(10183) EM
RE:	Stakeholder Engagement Plan - Dalyshope		

Dear Mr Kolani,

The Anglo Operations Proprietary Limited (Anglo) Dalyshope application, reference number 30/1/2/3/2/1(10183) EM, has reference.

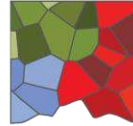
The applicant received acknowledgement of the Environmental Authorisation Application from the Department of Mineral Resources and Energy, in a letter dated 10 June 2020. In accordance with the latest Government Notice Regulations No 650, issued on 05 June 2020, as stipulated in Appendix 2 thereof, a Public Participation Plan must be submitted to the Case Officer.

Digby Wells Environmental is the appointed Environmental Assessment Practitioner, and hereby submits the Public Participation Plan for the proposed Dalyshope Project, for your comment and approval.

Regards,

Xan Taylor

Environmental Consultant



DIGBY WELLS

ENVIRONMENTAL

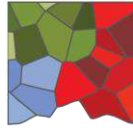
Table 1: Stakeholder Engagement Plan

Project Phases	Stakeholders groups	Communication Methods	Outputs
Draft Scoping	General public	<ul style="list-style-type: none"> Placement of newspaper advertisement. 	<ul style="list-style-type: none"> Register Interested and Affected Parties
	National government	<ul style="list-style-type: none"> Distribution of e-mail, SMS and WhatsApp notifications. Distribution of BID and Registration Sheet. Ms Teams Meetings (only if requested). 	<ul style="list-style-type: none"> Meeting recoding. Meeting Minutes. Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
	Provincial and District and Local government	<ul style="list-style-type: none"> Distribution of e-mail, SMS and WhatsApp notifications. Distribution of BID and Registration Sheet. 	<ul style="list-style-type: none"> Comments received will be captured into the CRR.
	Neighbouring landowners	<ul style="list-style-type: none"> Distribution of e-mail, SMS and WhatsApp notifications. Distribution of BID and Registration Sheet. Virtual or Face-to-face: Focus Group Meetings. 	<ul style="list-style-type: none"> Meeting Minutes. Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
	Closest Community (Lesedi): Ward Committee Members	<ul style="list-style-type: none"> Distribution of e-mail, SMS and WhatsApp notifications. Distribution of BID and Registration Sheet via e-mail/ and WhatsApp. Face-to-face: Focus Group Meetings. 	<ul style="list-style-type: none"> Meeting Minutes. Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.

Project Phases	Stakeholders groups	Communication Methods	Outputs
	Closest Community (Lesedi): Women and Youths	<ul style="list-style-type: none"> • Distribution of e-mail, SMS and WhatsApp notifications. • Distribution of BID and Registration Sheet. • Face-to-face: 2 x Focus Group Meetings 	<ul style="list-style-type: none"> • Meeting Minutes. • Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
Final Scoping	All stakeholders in our database	<ul style="list-style-type: none"> • Distribution of e-mail, SMS and WhatsApp notifications. • Upload Non-Technical Summary, Report and CRR onto Digby Wells website. • Distribute the Non-technical summary via WhatsApp 	<ul style="list-style-type: none"> • Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
Draft Environmental Assessment Report	All stakeholders in our database	<ul style="list-style-type: none"> • Distribution of e-mail, SMS and WhatsApp notifications. • Radio Announcement • Distribute the Non-technical summary via WhatsApp 	<ul style="list-style-type: none"> • Meeting Minutes. • Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
	Neighbouring landowners	<ul style="list-style-type: none"> • Virtual or Face-to-face: Focus Group Meetings 	<ul style="list-style-type: none"> • Meeting Minutes. • Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
	Closest Community (Lesedi): Ward Committee Members	<ul style="list-style-type: none"> • Face-to-face: Focus Group Meetings 	<ul style="list-style-type: none"> • Meeting Minutes. • Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.

Project Phases	Stakeholders groups	Communication Methods	Outputs
	Closest Community (Lesedi): Women and Youths	<ul style="list-style-type: none"> Face-to-face: 2 x Focus Group Meetings 	<ul style="list-style-type: none"> Meeting Minutes. Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
Final Environmental Assessment Report	All stakeholders in our database	<ul style="list-style-type: none"> Distribution of e-mail, SMS and WhatsApp notifications. Distribute the Non-technical summary via WhatsApp. 	<ul style="list-style-type: none"> Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.
Record of Decision	All stakeholders in our database	<ul style="list-style-type: none"> Place a newspaper advertisement or/ and a radio announcement. Send e-mail, SMS and WhatsApp notifications. 	<ul style="list-style-type: none"> Capture comments/ issues and recommendations onto CRR; where applicable, distribute specific comments to the relevant Specialists.

*virtual meetings may not be possible in the area due to poor cell-phone/ network signal.



DIGBY WELLS

ENVIRONMENTAL

COVID-19 Measures during Face-to-face Meetings



Avoid large gatherings:

- No gatherings of 50+ people will be held. All Focus Group Meetings will comprise of 15 people or less.
- Participants will be confirmed by invitation only.



Wearing of cloth face-masks:

- Mandatory wearing of face masks by all participants incl. Consultants.
- Universal Coal will provide face masks for participants.
- Both Consultants and Community members have right to refuse to participate if someone is refusing to wear a mask.



Maintenance of Social distancing:

- Consultants and community members will be seated 2m apart in all Focus Group Meetings.
- Meetings will mostly be held outside; when possible; if inside, DWE will ensure that there is adequate ventilation.



Hand washing and sanitising:

- Hand sanitisers will be provided in all meetings.
- DWE and Universal Coal will provide hand sanitisers at the entrance of the venue.

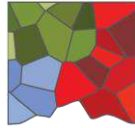


Regular cleaning of shared surfaces and equipment:

- Consultants will sanitise and clean chairs and tables in the venue regularly.
- There will be a designated rubbish bin in the meeting venue to collect all waste generated. All waste will be handled and treated as hazardous waste.



Appendix H: Proof of Stakeholders Consultation



DIGBY WELLS
ENVIRONMENTAL

Environmental Regulatory Processes Required for the Proposed Dalyshope Coal Mining Project, situated in the Magisterial District of Lephalale, Limpopo Province

SCOPING PHASE PUBLIC MEETING ON 16 JULY 2020





DIGBY WELLS
ENVIRONMENTAL

ATTENDANCE REGISTER FOR

MEETING NAME:

VENUE:

DATE:



PRESENTER: _____

SUBJECT: _____

NAME AND SURNAME	DEPARTMENT / DEPARTEMENT	CELL PHONE NUMBERS	EMAIL ADDRESS	SIGNATURE / HANDTEKENING
Ditiro Majaphoto	Community Rights Defender	079 371 6655	ditiromajaphoto@gmail.com	
MMapula Maposi	Word Committee 03	019 087 5156		
Mama Tlaka	Community Word	072 931 788		M M Tlaka
John Mochamebe	Community Word	076 50 80263		
Godfrey Rato Mosa	Community Member	066 180 5162	Godfrey.mosa@gmail.com	
Godi Mochamebe	Community M	015 676 4645		
Lazarus Molefe	Community M	063 961 7706		
LAEZEN Molefe	Word Committee Member	076 11 8348	ll.molefe50@gmail.com	
MPHO MOCHAMBE	C.M	071 529 0231	MPHO MOCHAMBE070491@gmail.com	S.M Mochamebe
William Magowe	W	083 864 1913		
KNOAH MAGGAI	Word Committee	072 469 1172	—	



NAME AND SURNAME	DEPARTMENT / DEPARTEMENT	CELL PHONE NUMBERS	EMAIL ADDRESS	SIGNATURE / HANDTEKENING
Louisa Masabee	ward Committee	0265078312	lololouisa903@gmail.com	
JEREMIA NKOPU	Community Member	0636186309		
CHOKI Magwai	Community member	082 479 3670		
KLEINBOER Laka	Community member			
Stephens Mafapho	Community member	0727456250		
JOSEPH Hkwati	Community	063 67031496	ama11.com gale@kwatojoseph	



Project Name: Dalyshope Environmental Impact Assessment
Project No: UDC6170
Date: 16 July 2020

1 Present

Select Lesedi Community Members and Ward Committee Representatives	Refer to attendance register
Janet Mkhabela and William Maupi	Digby Wells Consultants

2 Apologies

Ward Councillor

3 Approval of Previous Minutes and Matters Arising

None

4 Presentation

JM chaired the meeting and WM from Digby Wells presented the project in Sepedi. The background information document, registration form and comment sheet were distributed to the attendees. The remaining BIDs, registration forms and comment sheets were given to the Ward committee members to distribute to the rest of the community.

5 Current Minutes and Action Items

Issues raised	Stakeholder	Response
Is this meeting intended to continue with the Social and Labour Plan discussion?	L Molefe (Ward Committee Representative)	No, the purpose of this meeting is to present the project and its potential impacts as identified in the absence of undertaking specialist studies. Specialist studies are currently underway.



Issues raised	Stakeholder	Response
		The SLP discussions will be resumed at a later date once Digby Wells and Universal Coal have received DMR directives related to the draft SLP submitted.
We understand that the municipality does not perceive the Lesedi as a formal settlement; however, we need the SLP to address issues related to water and other infrastructure development in the area.	D. Majapholo (Community Rights Defender)	Noted.
Digby Wells will undertake several licencing permits for the mine. How do we as a community get hold of these permits so that we can hold the mine to account for its negative impacts?	D. Majapholo (Community Rights Defender)	You can download and save these from the project website once we have uploaded them.
Mining companies wanting to work in the area should seek to understand our history.	L Molefe (Ward Committee Representative)	Noted
One of the mines in the area relocated people's graves (about 15 graves) without any notifications given to the population or compensation. The mine then changed its name when people started questioning what happened to their graves and it was eventually sold. So Universal should not do the same.	L Molefe (Ward Committee Representative) Repeated by J Nkoati (Representative from the Chief)	Noted
We used to work and live fulltime on some of these farms, and we buried our people in some of them; thus we need to be consulted if there are graves that will be affected.	J Nkoati (Representative from the Chief)	Noted, the project affected farms are Dalyshope and Klaarwater. These are owned by Anglo Coal. The cultural heritage specialist report will provide more information regarding the



Issues raised	Stakeholder	Response
Which farms will be affected by the project, are there any graves on the site?		presence or lack thereof graves and how they will be affected.
Most middle-aged people in the community have only primary schooling as there were no secondary schools in the area. How does Universal plan to upskill such people so that they can take up employment opportunities with the mine?	L Molefe (Ward Committee Representative)	This matter will be fully investigated in the social impact assessment study. Also, targets for training and capacity building for the community will be outlined in the mine's SLP which has been submitted to DMR for review and comment. The SLP will also be a public document so you will be able to hold Universal to account on non-delivery.
We understand that water and transportation of the coal from the area is still a challenge for the project. Our advice to Universal is to process the coal elsewhere - the newly opened mine in the area mines then transports the coal to Witbank for processing.	L Molefe (Ward Committee Representative)	Noted.
Have you heard about royalties? Can Universal consider paying the community royalties instead of implementing SLP programs as the municipality will never allow infrastructure development in the area?	L Molefe (Ward Committee Representative)	Noted, we will share your suggestion with Universal.
Universal should be aware that the Lesedi community is not interested in being relocated regardless of the project impacts. Our people will never be able to afford to live in a township situation.	D. Majapholo (Community Rights Defender)	Noted.
How will influx related impacts be managed?	D. Majapholo (Community Rights Defender)	The matter will be addressed as part of the social impact assessment study.



Issues raised	Stakeholder	Response
What can we do to ensure that our locally registered companies are offered procurement contracts?	J Nkinati (Community Member)	Apply for tenders, attend tender meetings and make sure that you present all the requested information on your proposal. Before universal starts its operations, attend some tender clarification meetings for another mine in order to familiarise yourselves with the processes, attend any training offered by business incubator agencies such as SEDA; draft your business plan so that you can qualify for some government funding, etc
Whenever you are planning to hold a meeting here, make sure you invite the Chief's representative that reside in the community as he was not invited to the previous meetings	J Nkoati (Representative from the Chief)	Noted with thanks. We were not aware there is the residing chief in the area.
Thank you for involving the community in the proposed project, the community appreciate your efforts and initiatives. Keep us posted with all the developments.	J Nkoati (Representative from the Chief)	Thank you, all developments will be communicated with the community.

6 Next Steps

- Digby Wells will schedule additional meetings regarding the SLP upon receipt of DMR directive.
- Notifications will be sent to the community and ward committee members for the submission and availability of:
 - Final Scoping Report;
 - Draft Environmental Impact Report; and
 - Environmental Authorisation.



7 Meeting Closed



Appendix I: Announcement Letters



11 August 2020

Project No: UCD6170

ENVIRONMENTAL REGULATORY PROCESSES REQUIRED FOR THE PROPOSED DALYSHOPE COAL MINING PROJECT, SITUATED IN THE MAGISTERIAL DISTRICT OF LEPHALALE, LIMPOPO PROVINCE

Availability of Final Scoping Report

Dear Stakeholders;

Digby Wells would like to thank all stakeholders who have contributed towards the Environmental Assessments undertaken for the Authorizations required for the proposed Dalyshope Coal Mining Project (the Project). This notice serves to inform you of the availability of the Final Scoping Report (FSR) for public comment as well as the submission of this document to the Department of Mineral Resources for review and decision making.

The FSR with the Comment and Response Report (CRR) for the proposed project is available on the Digby Wells website (www.digbywells.com) under Public Documents or via data-free website (<http://view.datafree.co/PublicDocuments/>). All comments must be forwarded directly to the government official responsible. Kindly **copy-in** Digby Wells into your written submission to the DMR. For comments, please see the contact details below.

Due to the COVID-19 national lock down, the Final Scoping Report has been submitted and released electronically via <http://view.datafree.co/PublicDocuments/>.

Please use the Project reference number when providing your comment: **UCD6170**

DMR Reference Number: LP 30/1/2/3/2/1(10183) EM

<p>Attention: Mr. T.C Kolani</p> <p>Department of Mineral Resources: Mineral Regulation</p> <p>Physical Address: 1st floor Saveways Crescent Centre, Mandela Drive, Emalahleni,1035</p> <p>Postal Address: Private Bag X7279, Emalahleni,1035</p> <p>Tel: 013 653 0500 Fax: 013 656 1474</p> <p>Email: Thivhulawi.Kolani@dmre.gov.za</p>	<p>Digby Wells Environmental</p> <p>Postal address: Private Bag X10046, Randburg, 2125</p> <p>Tel: (011) 789-9495 Fax: (011) 069 6801</p> <p>Email: sh@digbywells.com</p>
--	---

If you require additional information about the Project, please do not hesitate to contact Digby Wells.

Regards,

A handwritten signature in black ink, appearing to read 'Janet Mkhabela'. The signature is stylized with large, overlapping loops and a cursive style.

Janet Mkhabela


Stakeholder Engagement Office

Digby Wells Environmental



Appendix J: Comments received and CRR




**Environmental Regulatory Process required for the proposed Environmental
Regulatory Process Required for The Proposed Dalyshope Coal Mining Project
Near Steenbokpan, Limpopo Province**

REGISTRATION AND COMMENT FORM

JUNE 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela / or Thembinkosi Zulu of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
I would like to receive my notifications by	<input checked="" type="radio"/> Email	<input type="radio"/> SMS	<input type="radio"/> Post	<input type="radio"/> Fax

Please indicate which sector you represent and also provide a name

Government Department	ESKOM HOLDINGS (PTY) LTD
Municipality	
Community	
Non-Government Organisation	
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	ZANDER, EENSAAMHEID, NAAIKWONTKOMEN, HANGULF, KROMDRAAI, GROOTVALLEI, GROOTESTRYP, PEERBOM, ZONDESIE, ZWARTWATER
Land occupier	



Please fill in your contact details below for the project database

Title, Full Name	ALAN MICHAEL BOSMAN (MR.)				
Designation	OFFICER - LAND MANAGEMENT				
Cellphone	083 226 9589	Fax	-	Tel	-
Email	ALAN.BOSMAN@ESKOM.CO.ZA				
Postal Address	-				

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we gather comments from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?
ROAD, RAIL TRAFFIC, POTENTIAL POLLUTION, CRIME
How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)
POSSIBLE AIR QUALITY, GROUND WATER IMPACTS.
TRAFFIC, CRIME.
How can these impacts be managed, avoided and / or fixed?
CAREFUL IMPACT ASSESSMENT, PLANNING & SUCCESSFUL IMPLEMENTATION OF MITIGATING MEASURES.
If you are a landowner or occupier, what is your land currently being used for?
INDUSTRIAL, AGRICULTURAL & GAME MANAGEMENT.
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?
NOT KNOWN



Where are these found?
NOT KNOWN
Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)
ROAD & RAIL IMPACTS.
If so how can these impacts (affects) be managed, avoided or fixed?
CAREFUL PLANNING & IMPLEMENTATION OF MITIGATION MEASURES.

General Comments

CONCERN OVER IMPACT ON INTERNATIONAL RIVER (LIMPOPO)
POLLUTION POTENTIAL
CRIME IMPACT
TRAFFIC MANAGEMENT

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name	MR. MICHAEL TAFFA	Title, Full Name	
Organisation	ESKOM	Organisation	
Cellphone	073 275 49504	Cellphone	
Email	TAFFAM@ESKOM.CO.ZA	Email	

Signature: 

Date: 2020.06.26

Stakeholder Engagement

From: Bernard Enslin <servitudewatch@gmail.com>
Sent: Monday, April 20, 2020 11:05 AM
To: Stakeholder Engagement
Subject: Fwd: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

Follow Up Flag: Follow up
Flag Status: Completed

how must I register if I am already on your list as an I&AP

Groete / Regards
Lid/Member
Bernard Enslin
SERVITUDEWATCH CC
2011/038157/23
Cell: 082 872 6242

----- Forwarded message -----

From: **Bernard Enslin** <servitudewatch@gmail.com>
Date: Mon, Apr 20, 2020 at 10:59 AM
Subject: Re: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.
To: Stakeholder Engagement <sh@digbywells.com>

to whom it may concern

If I understand correctly, the comments can only be given after the stakeholder engagement and discussion of related documents and reports.

Please advise

Groete / Regards
Lid/Member
Bernard Enslin
SERVITUDEWATCH CC
2011/038157/23
Cell: 082 872 6242

On Mon, Apr 20, 2020 at 9:29 AM Stakeholder Engagement <sh@digbywells.com> wrote:

Dear Stakeholder,

Digby Wells Environmental (Digby Wells) has been commissioned, as an independent environmental consultancy, by Universal Coal (Pty) Limited to conduct an Environmental Impacts Assessment (EIA) and Environmental Management Plan (EMP) processes on their behalf for The Proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

If you are receiving this email it means that you have been registered as a stakeholder for the of the proposed Project. Attached to this communication is the project announcement notification letter and Background Information Document together with the Registration and Comment Form attached with our contact information and instructions on how to send your comments and issues.

The Draft Scoping report for the project is now available on the Digby Wells website www.digbywells.com under public documents, for your perusal and comments.

Comment Period

Please Note: Due to the COVID-19 national lock down, the public engagement process will be extended and this timeframe will be shared with I&APs once the timeframe can be determined.

Digby Wells' internal Project reference number is: **UCD6170**

Please do not hesitate to contact us for any additional information required

Stakeholder Engagement Team

Office +27 (0) 11 789 9495

Fax +27 (0) 11 789 9498

sh@digbywells.com

www.digbywells.com

Stakeholder Engagement

From: Stakeholder Engagement
Sent: Wednesday, July 1, 2020 2:24 PM
To: Elana
Subject: RE: UCD6170
Attachments: UCD6170_Bacground_Information_Document.pdf

Good day Ms. Greyling,

Thank you for your email. Can you please complete the attached so that we have all your contact information and written comments.

Kind regards,


Stakeholder Engagement Team

From: Elana <bububush@lantic.net>
Sent: Wednesday, 01 July 2020 12:20
To: Stakeholder Engagement <sh@digbywells.com>
Subject: UCD6170

Goodday,
I would like to register as an I & A party.
I object against this proposed project due to quite a few reasons.
Will there be any public participation? If so, when?
Please send me the infoirmation.
Regards
E Greyling
ccl
0828638696

Sent from [Mail](#) for Windows 10




**Environmental Regulatory Process required for the proposed Environmental
Regulatory Process Required for The Proposed Dalyshope Coal Mining Project
Near Steenbokpan, Limpopo Province**

REGISTRATION AND COMMENT FORM

JUNE 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela / or Thembinkosi Zulu of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	Yes		No	
I would like to receive my notifications by	Email	SMS	Post	Fax

Please indicate which sector you represent and also provide a name

Government Department	
Municipality	
Community	
Non-Government Organisation	The Endangered wildlife Trust
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	W/A
Land occupier	W/A.

Please fill in your contact details below for the project database

Title, Full Name	Mrs Ashleigh Dare			
Designation	Project Manager			
Cellphone	0836601480	Fax	-	
Email	ashleighd@ewt.org.za			
Postal Address	-			

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we *gather comments* from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?

The proposed mine is in an area of very high importance to free roaming cheetah (a nationally protected species), which ~~will~~ would be impacted by the development of the mine and the associated infrastructure - which will also impact other species of (*)

How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)

(*) fauna and flora. We are greatly concerned about the resultant habitat destruction, movement barriers and wildlife vehicle collisions that will occur.

From a socio-economic perspective we are concerned about (*)

How can these impacts be managed, avoided and / or fixed?

(*) the loss of ecosystem services.

The impacts can be avoided by not mining in this area.

If you are a landowner or occupier, what is your land currently being used for?

W/D.

Are there any environmental, social or heritage features on the proposed project area we need to be aware of?

Detailed above - this area is of high importance to free roaming cheetah (a listed species in the ICF's list, listing) an vulnerable.

Further this coal mine could impact on the water quality of the Limpopo River.



Where are these found?

Both occur naturally within the proposed mining area

Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)

~~NA~~ N/A.

If so how can these impacts (affects) be managed, avoided or fixed?

N/A.

General Comments

Risks related to Cheekah, the Limpopo River, and other species of fauna and flora which may be impacted by the infrastructure development (including but not limited to habitat degradation, fragmentation, movement barriers and collisions with vehicles) must be fully considered and addressed.

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name		Title, Full Name	
Organisation		Organisation	
Cellphone		Cellphone	
Email		Email	

Signature:

Date:

24 July 2022



Environmental Regulatory Process required for the proposed Environmental Regulatory Process Required for The Proposed Dalyshope Coal Mining Project Near Steenbokpan, Limpopo Province

REGISTRATION AND COMMENT FORM

March 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	Yes		No		
I would like to receive my notifications by	Email	<input checked="" type="checkbox"/>	SMS	Post	Fax

Please indicate which sector you represent and also provide a name

Government Department	Eskom Distribution Limpopo
Municipality	
Community	
Non-Government Organisation	
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	
Land occupier	

Please fill in your contact details below for the project database



Title, Full Name	Mr Xander Neethling			
Designation	Land & Rights Supervisor			
Cellphone	+27 82 349 6971	Fax		Tel +27 15 299 0527
Email	NeethLX@eskom.co.za			
Postal Address				

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we *gather comments* from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?
Existing Eskom Electrical network and future supply to the customer
How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)
How can these impacts be managed, avoided and / or fixed?
If you are a landowner or occupier, what is your land currently being used for?
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?
Where are these found?



Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)
Eskom Powerlines
If so how can these impacts (affects) be managed, avoided or fixed?

General Comments

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name		Title, Full Name	
Organisation		Organisation	
Cellphone		Cellphone	
Email		Email	

Signature *Xander Neethling*

Date 20/4/2020

Eskom requirements for work in or near Eskom servitudes.

1. Eskom's rights and services must be acknowledged and respected at all times.
2. Eskom shall at all times retain unobstructed access to and egress from its servitudes.
3. Eskom's consent does not relieve the developer from obtaining the necessary statutory, land owner or municipal approvals.
4. Any cost incurred by Eskom as a result of non-compliance to any relevant environmental legislation will be charged to the developer.
5. If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the developer's activities or because of the presence of his equipment or installation within the servitude restriction area, the developer shall pay such costs to Eskom on demand.
6. The use of explosives of any type within 500 metres of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the developer must give at least fourteen working days prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process. It is advisable to make application separately in this regard.
7. Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilised so as to prevent erosion. The measures taken shall be to Eskom's satisfaction.
8. Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the developer, his/her agent, contractors, employees, successors in title, and assignees. The developer indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the developer's equipment.
9. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the developer must give at least seven working days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager

Note: Where and electrical outage is required, at least fourteen work days are required to arrange it.

10. Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.
11. Under no circumstances shall rubble, earth or other material be dumped within the servitude restriction area. The developer shall maintain the area concerned to Eskom's satisfaction. The developer shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom.
12. The clearances between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by *Regulation 15* of the *Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993)*.
13. Equipment shall be regarded electrically live and therefore dangerous at all times.
14. In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as an additional safety precaution, Eskom will not approve the erection of houses, or structures occupied or frequented by human beings, under the power lines or within the servitude restriction area.
15. Eskom may stipulate any additional requirements to highlight any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant.
16. It is required of the developer to familiarise himself with all safety hazards related to Electrical plant.
17. Any third party servitudes encroaching on Eskom servitudes shall be registered against Eskom's title deed at the developer's own cost. If such a servitude is brought into being, its existence should be endorsed on the Eskom servitude deed concerned, while the third party's servitude deed must also include the rights of the affected Eskom servitude.

John Geeringh (Pr Sci Nat)

Senior Consultant Environmental Management
Eskom GC: Land Development

Stakeholder Engagement

From: John Geeringh <GeerinJH@eskom.co.za>
Sent: Thursday, July 9, 2020 9:53 AM
To: Stakeholder Engagement
Subject: RE: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.
Attachments: Eskom requirements for work in or near Eskom servitudes mining exploration.doc
Follow Up Flag: Follow up
Flag Status: Flagged

Please find attached Eskom general comments for works at or near Eskom infrastructure. Please send me a KMZ file of the affected property / proposed mining area.

Kind regards

John Geeringh (Pr Sci Nat)(EAPASA)
Senior Consultant Environmental Management
Land and Rights
Eskom Transmission Division
Megawatt Park, D1Y42, Maxwell Drive, Sunninghill, Sandton.
P O Box 1091, Johannesburg, 2000.
Tel: 011 516 7233
Cell: 083 632 7663
Fax: 086 661 4064
E-mail: john.geeringh@eskom.co.za

From: Stakeholder Engagement [mailto:sh@digbywells.com]
Sent: 24 June 2020 05:04 PM
Subject: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

Dear Stakeholder,

Digby Wells Environmental (Digby Wells) has been commissioned, as an independent environmental consultancy, by Universal Coal (Pty) Limited to conduct an Environmental Impacts Assessment (EIA) and Environmental Management Plan (EMP) processes on their behalf for The Proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

If you are receiving this email it means that you have been registered as a stakeholder for the of the proposed Project. Attached to this communication is the project announcement notification letter and Background Information Document together with the Registration and Comment Form attached with our contact information and instructions on how to send your comments and issues.

Digby Wells hereby informs I&APs that the Draft Scoping Report is available on the Digby Wells website www.digbywells.com. The Report is also available on Digby Wells' data-free link <http://view.datafree.co/PublicDocuments/> for your download, perusal and comments. The aforementioned report will be available for public comments for a period of 30 days, from **24 June 2020** to **24 July 2020** for a 30-day legislated period.

Digby Wells' internal Project reference number is: **UCD6170**

Please do not hesitate to contact us for any additional information required.

Stakeholder Engagement Team

Office +27 (0) 11 789 9495

Fax +27 (0) 11 789 9498

WhatsApp +27 68 297 8335

sh@digbywells.com

NB: This Email and its contents are subject to the Eskom Holdings SOC Ltd EMAIL LEGAL NOTICE which can be viewed at http://www.eskom.co.za/Pages/Email_Legal_Spam_Disclaimer.aspx

Stakeholder Engagement

From: Stakeholder Engagement
Sent: Friday, July 24, 2020 3:22 PM
To: 'Ashleigh Dore'
Cc: Derek Van Der Merwe; Dr David Mills; Dr Ian Little
Subject: RE: EWT registration as an I&AP re UCD1670

Dear Ashleigh Dore,

Thank you for your communication and interest in the Dalyshope Coal Mining Project. Kindly note that your comments will be registered and captured on the Comment and Response Report.

Warm Regards,

Stakeholder Engagement Team

Office +27 (0) 11 789 9495
Fax +27 (0) 11 789 9498

sh@digbywells.com
www.digbywells.com

From: Ashleigh Dore <ashleighd@ewt.org.za>
Sent: Friday, July 24, 2020 3:17 PM
To: Stakeholder Engagement <sh@digbywells.com>
Cc: Derek Van Der Merwe <derekv@ewt.org.za>; Dr David Mills <DavidM@ewt.org.za>; Dr Ian Little <ianl@ewt.org.za>
Subject: EWT registration as an I&AP re UCD1670

Dear Ms Mkhabela and Ms Zulu

Kindly see attached for the registration and comment form prepared and submitted by the Endangered Wildlife Trust. Kindly acknowledge receipt.

Yours sincerely

Ashleigh Dore
Wildlife and Law Project Manager
Attorney (non-practising)

Endangered Wildlife Trust
W + 27 87 021 0398 | Ext 595 | C + 27 836601480 | Skype ashleigh.dore



Broad-Based Black Economic Empowerment – BBBEE Level 4 Certificate & 95% Civil Society Organisation
PBO number: 930 001 777
NPO number: 015-502 NPO
IT number: IT 6247

Physical Address: 27 and 28 Austin Road, Glen Austin AH, Midrand, 1685, Gauteng, South Africa
Postal Address: Private Bag X 11, Modderfontein 1645, Gauteng, South Africa



Disclaimer

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Stakeholder Engagement

From: Mariette Liefferink <mariette@pea.org.za>
Sent: Wednesday, June 24, 2020 5:23 PM
To: Stakeholder Engagement
Subject: RE: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

Noted, with thanks.

Best Regards
Mariette Liefferink
CEO: FEDERATION FOR A SUSTAINABLE ENVIRONMENT
TEL. (+27) 11 465 6910
(+27) 73 231 4893
Postnet Suite #113, Private Bag X153, Bryanston, 2021
E-MAIL: mariette@pea.org.za

From: Stakeholder Engagement <sh@digbywells.com>
Sent: 24 June 2020 05:03 PM
Subject: UCD6170: Announcement on the availability of the Draft Scoping report for the proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

Dear Stakeholder,

Digby Wells Environmental (Digby Wells) has been commissioned, as an independent environmental consultancy, by Universal Coal (Pty) Limited to conduct an Environmental Impacts Assessment (EIA) and Environmental Management Plan (EMP) processes on their behalf for The Proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province.

If you are receiving this email it means that you have been registered as a stakeholder for the of the proposed Project. Attached to this communication is the project announcement notification letter and Background Information Document together with the Registration and Comment Form attached with our contact information and instructions on how to send your comments and issues.

Digby Wells hereby informs I&APs that the Draft Scoping Report is available on the Digby Wells website www.digbywells.com. The Report is also available on Digby Wells' data-free link <http://view.datafree.co/PublicDocuments/> for your download, perusal and comments. The aforementioned report will be available for public comments for a period of 30 days, from **24 June 2020** to **24 July 2020** for a 30-day legislated period.

Digby Wells' internal Project reference number is: **UCD6170**
Please do not hesitate to contact us for any additional information required.

Stakeholder Engagement Team

Office +27 (0) 11 789 9495
Fax +27 (0) 11 789 9498
WhatsApp +27 68 297 8335
sh@digbywells.com

Stakeholder Engagement

From: Patrick Dowling <patrick@tops.org.za>
Sent: Monday, April 20, 2020 10:36 AM
To: Stakeholder Engagement
Subject: UCD6170: proposed Dalyshope Coal Mining Project near Steenbokpan in the Limpopo Province


Follow Up Flag: Follow up
Flag Status: Completed

Hi there

Please register WESSA as an I@AP for this process: **UCD6170**

Patrick Dowling

Wildlife and Environment Society of South Africa – Environmental Governance group



**Environmental Regulatory Process required for the proposed Environmental
Regulatory Process Required for The Proposed Dalyshope Coal Mining Project
Near Steenbokpan, Limpopo Province**

REGISTRATION AND COMMENT FORM

JUNE 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela / or Thembinkosi Zulu of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	Yes <input checked="" type="checkbox"/>	No	
I would like to receive my notifications by	Email <input checked="" type="checkbox"/>	SMS	Post <input type="checkbox"/>
			Fax <input type="checkbox"/>

Please indicate which sector you represent and also provide a name

Government Department	
Municipality	WATERBERS DISTRICT MUNICIPALITY
Community	
Non-Government Organisation	
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	
Land occupier	



Please fill in your contact details below for the project database

Title, Full Name	MR VINCENT RAPHUNGA				
Designation	AIR QUALITY OFFICER				
Cellphone	079502 6112	Fax	014-717-2398	Tel	014-718 3300
Email	vraphunga@waterberg.gov.za				
Postal Address	Private Bag X 1018, Modimolle, 0510				

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we gather comments from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?

Ambient Air Quality Standards within the Waterberg District Municipality is affected.

How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)

Health of the community could be negatively affected and compromised.

How can these impacts be managed, avoided and / or fixed?

All activities must be done according to Air Quality Acts and Regulations.

If you are a landowner or occupier, what is your land currently being used for?

[Handwritten signature]

Are there any environmental, social or heritage features on the proposed project area we need to be aware of?

[Handwritten signature]

Where are these found?

Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)

If so how can these impacts (affects) be managed, avoided or fixed?

General Comments

General Comments section with multiple horizontal lines for text entry.

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name		Title, Full Name	
Organisation		Organisation	
Cellphone		Cellphone	
Email		Email	

Signature: *Daphnya*

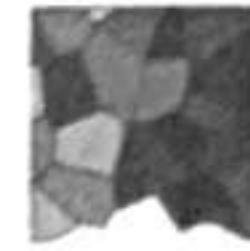
Date: 01/07/2020



Title, Full Name	Dr Wm Taylor				
Designation	WESSA howveld				
Cellphone	0764139566	Fax	—	Tel	—
Email	Wentaylorca@gmail.com / conserva@global.co.za				
Postal Address					

Environmental Impact Assessment Regulations of 2014, promulgated in terms of the National Environmental Management Act, as amended, Section 44 (1) requires that we gather comments from I&APs. Please complete the questions below. Should you require assistance in completing these questions please contact the Stakeholder Engagement Office at contact information provided above.

How do you think the project might impact (affect) you?
Not necessarily. Interest taken in respect of representative of WESSA
How do you think the project might impact (affect) your socio-economic conditions? (e.g. livelihoods, farm, business, household)
See above
How can these impacts be managed, avoided and / or fixed?
See above
If you are a landowner or occupier, what is your land currently being used for?
See above
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?
<ol style="list-style-type: none"> Proximity to Limpopo River and impact thereon. Question of classification of nearby Limpopo Govt- in terms of Limpopo Bioregional Plan. * See general comments below.
Where are these found?



③ Impact on local communities agricultural activities in short, medium and long term.

④ Details on further expansion phases

Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)

See first question response.

If so how can these impacts (affects) be managed, avoided or fixed?

Require Scoping Report and EIA report/proces (in time) to make valued judgement and comments

General Comments

Empty lined area for general comments.

If there are any other stakeholders, we should include onto the stakeholder database for the proposed project, please provide their contact details.

Title, Full Name	Dr HR TAYLOR	Title, Full Name	
Organisation	WESSA	Organisation	
Cellphone	076 413 9566	Cellphone	
Email	hewtaylor@wessa.org.za	Email	

Signature

Date

Handwritten signature

28/4/20



Environmental Regulatory Process required for the proposed Environmental Regulatory Process Required for The Proposed Dalyshope Coal Mining Project Near Steenbokpan, Limpopo Province

REGISTRATION AND COMMENT FORM

March 2020

*Registered Interested and Affected Parties (I&APs) will be informed of ongoing developments via their preferred means of communication (SMS, email, post or fax). The draft Scoping Report is available for comment **electronically**. The report will be made available via the Digby Wells website www.digbywells.com (under Public Documents), as per the announcement letter to be distributed. Comments raised by stakeholders will assist in informed decision-making for authorities and provides information to be considered by the project team and specialists conducting the Environmental Assessment Process. Please register as an Interested and Affected Party (I&AP) and provide comments by sending this form, or other written correspondence, to the contact details provided below:*

Ms. Janet Mkhabela of Digby Wells Environmental Stakeholder Engagement Office:

Email: sh@digbywells.com

Please formally register me as an Interested and Affected Party (I&AP)	Yes	<input checked="" type="checkbox"/>	No
I would like to receive my notifications by	Email	<input checked="" type="checkbox"/>	SMS
	Post		Fax

Please indicate which sector you represent and also provide a name

Government Department	
Municipality	
Community	
Non-Government Organisation	Wildlife and Environment of Society of South Africa
Business	

If you are a landowner or land occupier, please indicate which farm(s) and portion(s) you reside on

Landowner	No
Land occupier	No

Please fill in your contact details below for the project database

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Scoping Phase						
Stakeholder Engagement	If I understand correctly, the comments can only be given after the stakeholder engagement and discussion of related documents and reports.	Bernard Enslin	Servitudewatch CC	20-Apr-20	Email	The Scoping Report was released during the South African national lockdown period. It was therefore communicated via the associated notification to inform I&APs that the comment period will be extended beyond the usual 30 day comment period. It was communicated to registered I&APs on 24 June, that the Draft Scoping Report was available via Digby Wells website on the data-free portal for a further 30 days public comment from 24 June 2020 to 24 July 2020. Comments were, however, accepted and captured from 20 April 2020 to 24 July 2020.
Violation of people's constitutional rights	In the absence of public meetings – esp. given that not everyone has access to the internet where they can review the report and provide comments. The client should park the project until SE can be undertaken properly.				Telephonic	The comment period will be extended as per the DMR's instructions published on the 9th April and that we will explore other avenues to engage with stakeholders once we have been instructed by the government on the next steps re the lockdown.
Registration I&AP	Hi there Please register WESSA as an I@AP for this process: UCD6170 Patrick Dowling Wildlife and Environment Society of South Africa – Environmental Governance group	Patrick Dowling	Wildlife and Environment Society of South Africa – Environmental Governance group	20-Apr-20	Email	Good day, Thank you for your response. Please note that we have registered WESSA as an I@AP, and have sent notifications to the emails below: wessa@limpopomail.co.za/ info@wessanorth.co.za Could you please provide us with additional emails if there are any
Documents receipt confirmation	Dear Janet Thank you for your notification and information document. We hereby confirm receipt and will go through the documents. Please do keep us informed of the engagement meetings to follow as we will participate as neighbouring mine and landowners.	Lerato Ratsoenyane	Ledjadja Coal (Pty) Ltd	20-Apr-20	Email	As a registered I&AP, all further communications will be provided throughout the remainder of the project.
Registration I&AP	Good day, Attached please find Registration form on behalf of Eskom Distribution Limpopo	Mr Xander Neethling	Eskom Distribution Limpopo	20-Apr-20	Email	Good day Xander, Your email has been received with thanks. Please note that your comments will be captured on the CRR and you will be registered as an I&AP for the project.
Impact of the Project	Existing Eskom electrical network and future supply to the customer				Registration and Comment sheet	Power requirements for the project will be determined during the feasibility study and any impact to the existing and future supply will be discussed and addressed with Eskom once fully understood.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
Project impacts on infrastructure you might have (e.g. houses, buildings, roads)?	Eskom powerlines					Noted.
Registration of I&AP and Request for EIA documents	<p>Dear Madam</p> <p>Herewith included please find the I&AP registration form for the above-mentioned project. This registration is on behalf of the Wildlife and Environment Society of South Africa (WESSA) and correspondence must be directed in future to myself (above email address) and Dr Jeremy Anderson at conserva@global.co.za.</p> <p>The comments submitted on the accompanying document are based on the Announcement Letter and BID and are thus not comprehensive or complete. It will be necessary to be furnished with the EIA document and specialist reports and to be fully informed of the EA process including PPP meetings for this project as these become available in the future.</p> <p>Please acknowledge receipt of this email.</p> <p>Thanking you in advance.</p>	Dr Llew Taylor	Wildlife and Environment Society of South Africa (WESSA)	29-Apr-20	Email	<p>Good day Dr Llew Taylor</p> <p>Your email has been received with thanks.</p> <p>Kindly note that your comments will be captured on the CRR and you will be registered as an I&AP for the project.</p> <p>Please Note: Due to the COVID-19 national lock down, the Draft Scoping report for the project has been made available on the Digby Wells website www.digbywells.com under public documents, for your perusal and comments. Furthermore, the public engagement process will be extended and this timeframe will be shared with I&APs once the timeframe can be determined.</p> <p>Please do not hesitate to contact us for any additional information required.</p> <p>Kindest Regards, Stakeholder Engagement Team</p> <p>All registered I&APs were notified on 24 June 2020 of the data-free download and extended comment period. The EIA will be provided to the public for comment when available and all registered I&APs will be informed of its availability and methods of access.</p>
How do you think the project might impact (affect) you?	Not necessarily, Interest taken in respect of representative of WESSA					WESSA representative registered as an I&AP in April 2020.
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?	<ol style="list-style-type: none"> Proximity to Limpopo River and Airport. Question of classification of area by Limpopo Government- in terms of Limpopo Bioregional plan 				Registration and Comment sheet	<p>The airports or landing strips identified in the area are listed below with their distance from the proposed mining activity:</p> <ul style="list-style-type: none"> Exxaro Manketti runway – 35km from site Fahad N R Balala Lodge – 47km from site Macheneng Airport (Botswana) – 50km from site Ellisras Airport – 50 km from site Kera Landing Strip - 63km from site <p>It is unlikely any of these airports will be impacted but should Digby Wells be unaware of any privately owned landing strips in the area, kindly provide us with the relevant information.</p> <p>Digby Wells will undertake the relevant specialist studies pertaining to Critical Biodiversity Areas and this will be presented in the EIA Phase.</p>
Where are these found?	Impact a local communities' agricultural activities in short, medium and long term.					This comment has been provided to the Pedological specialist and will be considered in the impact assessment phase.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
If so, how can these impacts (affects) be managed, avoided or fixed?	Require Scoping Report and EIA report/ process (in time) to tackle valued judgements and comments.					The Scoping Report was available for download from 20 April 2020 until 24 July 2020 (data-free download available from 24 June to 24 July). All registered I&APs will be informed of the EIA Report availability and the dates for comment.
Registration I&AP	Hi, Please register me and Michael Taffa as interested and affected parties on this project (see attached). Regards				Email	Dear Alan, Thank you for your communication and interest in the Dalyshope Coal Mining Project. Kindly note that your comments will be captured on the Comment and Response Report and you will be registered as an I&AP for the project. Warm Regards,
How do you think the project might impact (affect) you?	Road, Rail traffic, potential pollution and crime.					A Traffic Impact Assessment, Air Quality Impact Assessment and Socio-economic Impact Assessment will be undertaken as part of the EIA Phase. The Applicants are responsible for security from their site. This will include ensuring neighbouring farms are not illegally accessed, nor allow any unauthorised entry onto the mine site. The Standard Operating Procedure (SOP) will be developed and shared with neighbouring landowners once the mine has been approved.
Project impacts on socio-economic conditions (e.g. livelihoods, farm, business, household)?	Possible air quality and groundwater impacts as well as traffic and crime.					A Traffic Impact Assessment, Air Quality Impact Assessment, Socio-economic Impact Assessment and Groundwater Impact Assessment will be undertaken as part of the EIA Phase
How can these impacts be managed, avoided, and/or fixed?	Careful impact assessment, planning and successful implementation of mitigation measures.	Alan Bosman	Eskom Holdings (Pty) Ltd	26-Jun-20	Registration and Comment sheet	Impacts and the associated mitigation will be investigated by the various specialists in the EIA Phase of the Project. Should this Project be approved, the Applicant will be committed to environmental audits conducted by independent environmental consultants to measure compliance with the Environmental Management Plan.
If you are a landowner or occupier, what is your land currently being used for?	Industrial, agricultural and game management.					Thank you for the information provided.
Are there any environmental, social or heritage on the proposed project area we need to be aware of?	Not known.					Thank you for your response.
Project impacts on infrastructure you might have (e.g. houses, buildings, roads)?	Road and Rail Impacts.					Digby Wells has been appointed to conduct a Traffic Impact Assessment during the EIA Phase. All infrastructure within the blast radius must also be considered in

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
						the Blast Impact Assessment to be conducted during the EIA Phase.
If so, how can these impacts (affects) be managed, avoided or fixed?	Careful planning and implementation of mitigation measures.					Impacts and the associated mitigation will be investigated by the various specialists in the EIA Phase of the Project. Should this Project be approved, the Applicant will be committed to environmental audits conducted by independent environmental consultants to measure compliance with the Environmental Management Plan.
General comments	Concern over impact on international River (Limpopo); Potential pollution; Crime impact; and Traffic management					Thank you, your comments have been captured and will be considered during the EIA Phase.
Registration I&AP	Good day, I would like to register as an I & A party. I object against this proposed project due to quite a few reasons. Will there be any public participation? If so, when? Please send me the information. Regards E Greyling	Elana Greyling	Community	01-Jul-20	Email	Good day Ms. Greyling, Thank you for your email. Can you please complete the attached so that we have all your contact information and written comments. Kind regards, Stakeholder Engagement Team Ms Greyling has been registered as an I&AP and has been included in all correspondence pertaining to public participation. No further communication was received during the Scoping Phase public comment period. Due to Covid, no public meetings were held but data free access to the Scoping Report was provided to all I&APs. Focus Group Meetings were held with community representatives on 16 July and with directly affected landowners on 17 July.
Air Quality impacts	Ambient Air Quality Standards within the Waterberg District Municipality is affected					The Air Quality Impact Assessment will consider the cumulative impacts with respect to air quality.
Project impacts on socio-economic conditions (e.g. livelihoods, farm, business, household)?	Health of the Community could be negatively affected and comprised.	Vincent Raphunga (Air Quality Officer)	Waterberg District Municipality	01-Jul-20	Registration and Comment sheet	Consultation with the Lephalale Municipality indicated that air quality has deteriorated due to the power stations in the region. The Air Quality Impact Assessment will look at the baseline air quality (ie, the air quality in the area before the project is implemented) and the potential for increased air pollution if the project is implemented.
Impacts mitigation	All activities must be done according to Air Quality Acts and Regulations.					Noted. The Air Quality Impact Assessment report will be compliant with NEMA, NEM:AQA and relevant regulations.
General comments	Please find attached Eskom general comments for works at or near Eskom infrastructure. Please send me a KMZ file of the affected property / proposed mining area. Kind regards	John Geeringh	Eskom Transmission Division	09-Jul-20	Email	The Applicant, Anglo, acknowledges these comments. Eskom is a registered I&AP and will be informed throughout the remainder of the Environmental Authorisation Application process. These comments have been provided to the Applicant as some of these comments fall outside the current process to which this report

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
General comments	1. Eskom's rights and services must be acknowledged and respected at all times.					pertains.
General comments	2. Eskom shall at all times retain unobstructed access to and egress from its servitudes.					
General comments	3. Eskom's consent does not relieve the developer from obtaining the necessary statutory, landowner or municipal approvals.					The wayleave applications are separate application processes to the Environmental Authorisation process.
General comments	4. Any cost incurred by Eskom as a result of non-compliance to any relevant environmental legislation will be charged to the developer.					
General comments	5. If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the developer's activities or because of the presence of his equipment or installation within the servitude restriction area, the developer shall pay such costs to Eskom on demand.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	6. The use of explosives of any type within 500 metres of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the developer must give at least fourteen working days prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process. It is advisable to make application separately in this regard.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	7. Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilised so as to prevent erosion. The measures taken shall be to Eskom's satisfaction.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	8. Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the developer, his/her agent, contractors, employees, successors in title, and assignees. The developer indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the developer's equipment.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
General comments	9. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the developer must give at least seven working days' notice prior to the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued by the relevant Eskom Manager					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	10. Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	11. Under no circumstances shall rubble, earth or other material be dumped within the servitude restriction area. The developer shall maintain the area concerned to Eskom's satisfaction. The developer shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	12. The clearances between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	13. Equipment shall be regarded electrically live and therefore dangerous at all times.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	14. In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as an additional safety precaution, Eskom will not approve the erection of houses, or structures occupied or frequented by human beings, under the power lines or within the servitude restriction area.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	15. Eskom may stipulate any additional requirements to highlight any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	16. It is required of the developer to familiarise himself with all safety hazards related to Electrical plant.					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.
General comments	17. Any third-party servitudes encroaching on Eskom servitudes shall be registered against Eskom's title deed at the developer's own cost. If such a servitude is brought into being, its existence should be endorsed on					The Applicant has been made aware of this input. Eskom inputs and compliance will be adhered to.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
	the Eskom servitude deed concerned, while the third party's servitude deed must also include the rights of the affected Eskom servitude.					
Request for clarification	Is this meeting intended to continue with the Social and Labour Plan discussion?	L Molefe (Ward Committee Representative)	Lesedi Community	16-Jul-20	Focus Group Meeting	No, the purpose of this meeting is to present the project and its potential impacts as identified in the Scoping Phase. The Scoping Phase looks at the environmental baseline (the environment before the project is implemented). The next phase of the application process is the Impact Assessment Phase, which includes specialist studies which look at the project impacts in detail. Specialist studies are currently underway. The Environmental Impact Assessment Report will include a summary of the specialist studies, and all the specialist studies will be made available to the public for review. The SLP discussions will be resumed at a later date once Digby Wells and Universal Coal have received DMR directives related to the draft SLP submitted.
SLP to address the demands	We understand that the municipality does not perceive the Lesedi as a formal settlement; however, we need the SLP to address issues related to water and other infrastructure development in the area.	D. Majapholo (Community Rights Defender)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted.
Access to Permits	Digby Wells will undertake several licensing permits for the mine. How do we as a community get hold of these permits so that we can hold the mine to account for its negative impacts?		Lesedi Community	16/07/2020	Focus Group Meeting	The EIA Report will be made available, as well as the report associated with the Water Use Licence Application. The public therefore will be provided the opportunity to review Digby Well's reports before these reports are submitted to government. Once a licence or authorisation is issued by a government department, all registered I&APs will be informed. If any I&AP disagrees with the outcome or decision of a department, the decision can be appealed.
Understand the background of the proposed site.	Mining companies wanting to work in the area should seek to understand our history.	L Molefe (Ward Committee Representative)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted
Unlawful relocation of graves	One of the mines in the area relocated people's graves (about 15 graves) without any notifications given to the population or compensation. The mine then changed its name when people started questioning what happened to their graves and it was eventually sold. So Universal should not do the same.		Lesedi Community	16/07/2020	Focus Group Meeting	Noted
Request for consultation	We used to work and live full time on some of these farms, and we buried our people in some of them; thus, we need to be consulted if there are graves that will be affected. Which farms will be affected by the project, are there any graves on the site?	J Nkoati (Representative from the Chief)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted, the project affected farms are Dalyshope and Klarwater. These are owned by Anglo Coal. The cultural heritage specialist report will provide more information regarding the presence or lack thereof graves and how they will be affected.

Category	Comment Raised	Contributor	Organisation / Community	Date	Method	Response
The upskilling of the community	Most middle-aged people in the community have only primary schooling as there were no secondary schools in the area. How does Universal plan to upskill such people so that they can take up employment opportunities with the mine?	L Molefe (Ward Committee Representative)	Lesedi Community	16/07/2020	Focus Group Meeting	This matter will be fully investigated in the social impact assessment study. Also, targets for training and capacity building for the community will be outlined in the mine's SLP which has been submitted to DMR for review and comment. The SLP will also be a public document so you will be able to hold Universal to account on non-delivery.
Water Issues	We understand that water and transportation of the coal from the area is still a challenge for the project. Our advice to Universal is to process the coal elsewhere - the newly opened mine in the area mines then transports the coal to Witbank for processing.		Lesedi Community	16/07/2020	Focus Group Meeting	This not practical, Dalyshope is in Lephalale, to transport the coal to Witbank is uneconomical. During the feasibility study, methods will be investigated to reduce water consumption, such as filtration of tailing streams and recycling of water. In addition, the erection of fully enclosed water storage tanks to minimise the evaporation of water will be considered.
Royalties	Have you heard about royalties? Can Universal consider paying the community royalties instead of implementing SLP programs as the municipality will never allow infrastructure development in the area?		Lesedi Community	16/07/2020	Focus Group Meeting	Noted, we will share your suggestion with Universal.
Relocation	Universal should be aware that the Lesedi community is not interested in being relocated regardless of the project impacts. Our people will never be able to afford to live in a township situation.	D. Majapholo (Community Rights Defender)	Lesedi Community	16/07/2020	Focus Group Meeting	Noted.
Project Impacts	How will influx related impacts be managed?		Lesedi Community	16/07/2020	Focus Group Meeting	The matter will be addressed as part of the social impact assessment study.
Local Business	What can we do to ensure that our locally registered companies are offered procurement contracts?		Lesedi Community	16/07/2020	Focus Group Meeting	Apply for tenders, attend tender meetings and make sure that you present all the requested information on your proposal. Before universal starts its operations, attend some tender clarification meetings for another mine in order to familiarise yourselves with the processes, attend any training offered by business incubator agencies such as SEDA; draft your business plan so that you can qualify for some government funding, etc
Meeting Invite	Whenever you are planning to hold a meeting here, make sure you invite the Chief's representative that reside in the community as he was not invited to the previous meetings		Lesedi Community	16/07/2020	Focus Group Meeting	Noted with thanks. We were not aware there is the residing chief in the area.
Vote of thanks.	Thank you for involving the community in the proposed project, the community appreciate your efforts and initiatives. Keep us posted with all the developments (Chief's Representative).	J Nkinati (Community Member)	Lesedi Community	16/07/2020	Focus Group Meeting	Thank you, all developments will be communicated with the community.
Socio-economic	Will the project proceed?	Tharina Pelsler	Landowner	16/07/2020	Focus Group Meeting	From a legal perspective, the Applicant is required to have all the necessary licences and authorisations in place for the project to proceed. This process will take approximately a year to finalise. If approved the Applicant is usually provided a period of time to implement the project, and if mining activities do not commence within that timeframe, the authorisation will lapse.

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Traffic	<ol style="list-style-type: none"> 1. With regards to the road upgrade, will the road be tarred? 2. The roads to Stockpoort and Steenbokpan have been damaged by trucks. If the project goes ahead, to what extent will the surrounding road networks be impacted? 					<ol style="list-style-type: none"> 1. The design of the roads will be done in conjunction with the Provincial Roads Department following a Traffic Impact assessment. The recommendations of the Provincial Roads Department will be implemented 2. A traffic impact assessment will be undertaken during the EIA Phase to determine the impact coal trucks from this operation will have on the surrounding road network.
Groundwater	The borehole on the Farm Canada has dried out. Will there be enough water for this project and how will this impact surrounding land users?					As part of the Groundwater Impact Assessment, the effect on groundwater as a result of the mining operation will be modelled. It is unclear at this stage where the operation will get water from but several options must be investigated. If the project does rely on borehole water, the resource boreholes will need to be included in the model to predict the zone of influence.
Blasting	What impact will blasting have on boreholes and structures?					A Blast Impact Assessment will be conducted as part of the EIA Phase. This will record all structures within the specified blast radius and determine to what level these structures will be impacted, if at all.
Visual	How close can the rock dumps come to the fence? We are concerned about dust being blown off of these dumps.					Thank you for the comment. It has been noted and will be addressed during the EIA phase.
Visual	What is the long-term plan for the discard dump? And will they use topsoil to cover the dumps?					Discard or residue will be back filled into the pit or boxcut. The pit in turn will be rehabilitated upon closure.
Water	Can the mine abstract water from the Limpopo?					Although it is possible, this will be an unlikely option for the mine. The Limpopo is a shared resource with Botswana which requires international agreements to be in place, as well as permission to do so. Other water source options will be investigated before abstraction from the Limpopo is considered.
Socio-economic	Where will the mine staff live and how will they be transported?					The staff will be required to get their own accommodation in town or surrounding areas. Transport to and from the mine will be provided from designated points.
Socio-economic & Visual (sense of place)	We are concerned that we won't be able to attract foreign hunters to our lodge with a coal mine next door. We rely on international travellers to generate enough income to survive.					A Visual Impact Assessment will be undertaken during the EIA Phase to determine to what extent neighbouring farms will be visually exposed to mining activities. A Noise Impact Assessment and Blasting Impact Assessment will determine to what extent neighbouring farms will be exposed to noise and vibrations.
Life of Mine	Aren't there coal reserves to the north of Klaarwater? Will they mine these reserves after this pit is fully mined?					OC1 has a life of approximately 20 to 25 years. Should the Applicant want to mine any other reserve not contained in this application, the Applicant will need to apply to do so and undertake the necessary environmental investigations.
Socio-economic & Visual (sense of place)	If the mining area expands, it's better for the mine to buy the farm than to live next to a mine.					A Visual Impact Assessment will be undertaken during the EIA Phase to determine to what extent neighbouring farms will be visually exposed to mining activities. This application will only consider the

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						current mine plan, and should the mine plan change or be expanded, the impacts of the changes will need to be assessed.
Socio-economic	What is the market for the coal to be mined?	Piet Nel	Landowner	17/07/2020	Focus Group Meeting	The market is currently Eskom/local
Visual	What kind of visual barriers will be in place to prevent neighbouring farms from being exposed to the mine?					A Visual Impact Assessment will be undertaken during the EIA Phase and will determine to what extent neighbouring farms or road users will be affected.
Socio-economic	What is the project timeline?					The Application process will take approximately two years. Once all the necessary licences and authorisations are in place, the Applicant can commence with construction.
Groundwater & Cumulative impacts	This project will deplete all groundwater in the area. There are so many approved mining projects on the surrounding farms, that all these operations will deplete our groundwater resources. These mining companies must be held liable and a regional study must be undertaken to understand the far-reaching implications to groundwater and farming.					A Groundwater Impact Assessment, which will also consider cumulative impacts, will be undertaken in the EIA Phase.
Socio-economic & Visual	We can't hunt with an operational mine next door. We will lose international hunting clients.					A Visual Impact Assessment will be undertaken during the EIA Phase and will determine to what extent neighbouring farms or road users will be affected.
Groundwater	The environmental baseline needs to be done accurately to assess the actual impact of the project to groundwater.					A hydrocensus has been undertaken and the environmental baseline will be provided in the Groundwater Report and summarised in the EIA Report which will be made available for comment.
Security	How will Universal Coal keep their employees out of neighbouring farms?					All necessary security measures will be implemented on the mine. Strict access control into and exiting the mine will be implemented. All mine personnel will be issued with ID cards and be required to carry these ID cards.
Public participation	We prefer smaller meetings to large public meetings, as not everyone gets a chance to speak during large meetings.	Louw Swanepoel & Dewald de Beer	Landowner & attorney	17/07/2020	Focus Group Meeting	Due to Covid-19, Digby Wells is taking necessary precautions to avoid gathering groups of people. We will most likely conduct face-to-face meetings with essential stakeholder during the EIA Phase.
Blasting	How will neighbouring farms be impacted by blasting, especially the wildlife because it may scare the animals.					A Blast Impact Assessment will be conducted during the EIA Phase and will determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring farms will be affected.
Security	How will Anglo maintain the boundary fences?					Boundary fences will be inspected on a regular basis, generally daily but could be longer, to ensure no breaches. If a breach is detected during inspection the breach is mended as soon as possible.

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Groundwater	We are dependent on boreholes for water on the farm. We have four boreholes on the farm, one of which is very close to the Dalyshope.					Thank you for the information. Digby Wells will consider this during the EIA Phase. GPS co-ordinates for the boreholes have been requested.
Traffic	The roads are in a bad condition in the area and haul trucks will cause the roads to further deteriorate.					A Traffic Impact Assessment will be undertaken during the EIA Phase which will consider the impacts to the surrounding road network.
Noise and Blasting	Will the mine blast and how will they blast so that the noise doesn't affect the neighbouring farms?					A Blast Impact Assessment will be conducted during the EIA Phase and will determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring farms will be affected.
Blasting	Houses and dams have already been affected by the existing mines in the area.					The Blast Impact Assessment will consider all structures in the surrounding blast radius and determine to what extent these structures may be affected. The mine must also keep a record of structures and should a neighbouring landowner believe the mine has affected their property, the mine must investigate.
Environmental Legal Process	Do impact studies happen before or after mining starts?					The specialist impact assessments are required as part of the Environmental Authorisation application process. Generally, a mine requires at least three authorisations/licences before they are allowed to operate. These include: <ul style="list-style-type: none"> • Mining Right in terms of the MPRDA; • Environmental Authorisation in terms of NEMA; and • Water Use Licence in terms of the NWA.
Socio-economic	We farmers have been waiting for years to have confirmation whether the project will proceed or not. We need time to plan our future. We already face difficulties with financial planning with factors like draught. We need to know if Anglo plans to buy these farms so we can plan for our future. By not proceeding, Anglo is holding up development in the area in some respects. We need to know and be informed of what is going on. We need to prepare.					Only land required for mining activity will be purchased and negotiations will be held with those individual landowners at the appropriate time. Landowners should proceed with normal activities until they are approached by an authorised mine representative.
Cumulative impacts	Will Digby Wells consider the impact to surrounding farms? We've had so many specialists on our farm over the years so we hope this information will be used to provide an accurate impact from the project to the area.					Digby Wells looks at various aspect (ie, soil, water, social, air quality, etc) and determine how the mine infrastructure will impact the natural and social environment and must determine the extent of the impact. During the specialist site inspections, each specialists identified the various farms in the area which they wanted to survey, so the project impact is not necessarily focused on Klarrwater and Dalyshope. Older studies can be referenced, however, it must be noted that the environment is ever-changing and older data my no longer be relevant. As part of this process, each specialist must consider cumulative impacts for their respective filed of expertise. The older studies can be utilised for this purpose.

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Mine infrastructure	Is there coal beneath the plant area?	Ashleigh Dare	The Endangered Wildlife Trust	24-Jul-20	Registration and Comment sheet	No, the infrastructure layout considered the coal deposits in the area, and place infrastructure in such a way to avoid sterilising coal reserves.
How do you think the project might (affect) you?	The proposed mine is in an area of very high importance to free roaming cheetah (a naturally protected species), who would be impacted by the development of the mine and the associated infrastructure- which will also impact other species of fauna and flora.					Although the mining right extends over many farm portions, this application and related mining activities will only take place on Dalyshope and Klaarwater. These two farms are used for grazing, cattle breeding and hunting. Should the Applicant wish to expand mining activities beyond this scope, additional studies and applications must be undertaken. A protected tree assessment is being undertaken on Klaarwater and Dalyshope, and a Fauna and Flora Impact Assessment will also form part of the EIA Phase.
Project impacts on socio-economic-conditions (e.g. livelihoods, farms, business, household)	Fauna and Flora. We are greatly concerned about the resultant habitat destruction, movement barriers and wildlife vehicle collisions that will occur. From a socio-economic perspective we are concerned about the loss of ecosystem services.					The protected tree assessment pertains to identifying protected trees and applying to relocate these trees from the impacted mining area to preserve the. Ecosystem services must be considered in the EIA Phase by the relevant specialists.
How can these impacts be managed, avoided or fixed?	The impacts can be avoided by not mining the area.					The "No-go" alternative, preserving the status quo, must also be considered and presented in the EIA Report.
Are there any environmental, social or heritage features on the proposed project area we need to be aware of?	Detailed above. This area is of high importance to free roaming cheetah (a listed species in the TOPS list, listing un vulnerable). Further this Coal Mine could impact on the water of the Limpopo River.					Thank you, these concerns will be considered in the EIA Phase.
Where are these found?	Both occur naturally within the proposed mining area.					Noted. Thank you for this information.
General comments	Risks related to cheetah, the Limpopo River, and other species of fauna and flora, which may be impacted by the infrastructure development (including but not limited to habitat degradation, fragmentation, movement barriers, and collisions with vehicles) must be fully considered and addressed.					The specialist impact assessment, as mentioned, will be undertaken in the EIA Phase, and the identified impacts will be considered.
How do you think the project might impact (affect) you?	The project might assist the Leseding community with the necessary interventions to classify the area as a formal settlement.	Ditiro Jan Majapholo	Community Member	24-Jul-20	Registration and Comment sheet	The determination of a formal settlement is the responsibility of the municipality and therefore these concerns must be raised with the local municipality and directed through the correct channels of communication.
How do you think the project might (affect) you?	The project has the potential to contaminate the soil and air quality in the area which might negatively impact on agricultural activities and the wellbeing of the community. Wildlife will also be impacted as the project will contribute to habitat destruction.					Thank you for your comments. Air quality, soils and wildlife impacts will be assessed during the EIA Phase.
How can these impacts be	By following all relevant legislations pertaining to mining					Your details have been captured in the Stakeholder database for the

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managed, avoided or fixed?	and the environment. The project team should continuously involve and engage with the local community.					environmental-legal application processes and you will continue to receive communications for the remainder of the Project. During the EIA Phase, further public consultation will be undertaken and therefore further opportunity exists to provide comments into this environmental process.
Do you think the project could impact (affect) infrastructure you might have? (e.g. houses, buildings, roads)	Increased traffic and potholes on roads. Infrastructures more especially farmhouses will hugely be impacted by the blasting					A traffic Impact Assessment will be undertaken during the EIA Phase which will consider the impacts to the surrounding road network. A Blast Impact Assessment will be conducted during the EIA Phase and will determine how far the air blast and rock blast radii will extend. This will determine to what extent the neighbouring structures will be affected.
If so, how can these impacts (affects) be managed, avoided or fixed?	Construction of new roads and maintenance of the current Steenbokpan road					The Applicant is proposing to upgrade the access road to accommodate the haul trucks.
	Farm owners should be involved in decision-making regarding infrastructures in the vicinity of the mining area					All directly affected landowners are being consulted and will continue to be consulted throughout the environmental legal application process.
	The local community should be given first preference when awarding business tenders					The mine must consider local work force and services should local businesses be capable of providing the required services.
	The community, more especially women and youth should be given the necessary training before the mining activities can begin					This operation will be a contractor operation, meaning the staff requirements will be provided by a mining contractor. Any new opportunities that can be provided to the local communities must consider training and hiring from the community.
	The mining company should collaborate with the local municipality to build schools and houses for the community					The Applicant has submitted a Social and Labour Plan which has been negotiated with the local community, the municipality and the DMRE.
	Focus should be given to youth organisations in educating and improving the lives of the local youth					
	The local community should be given first preference when coming to permanent employment					This operation will be a contractor operation, meaning the staff requirements will be provided by a mining contractor. Any new opportunities that can be provided to the local communities must consider training and hiring from the community.
	The mine is responsible for all the environmental liabilities in terms of the 'Duty of Care' principle.					Yes, should the application be approved, and mining proceed, the duty of care will be the responsibility of the mine.